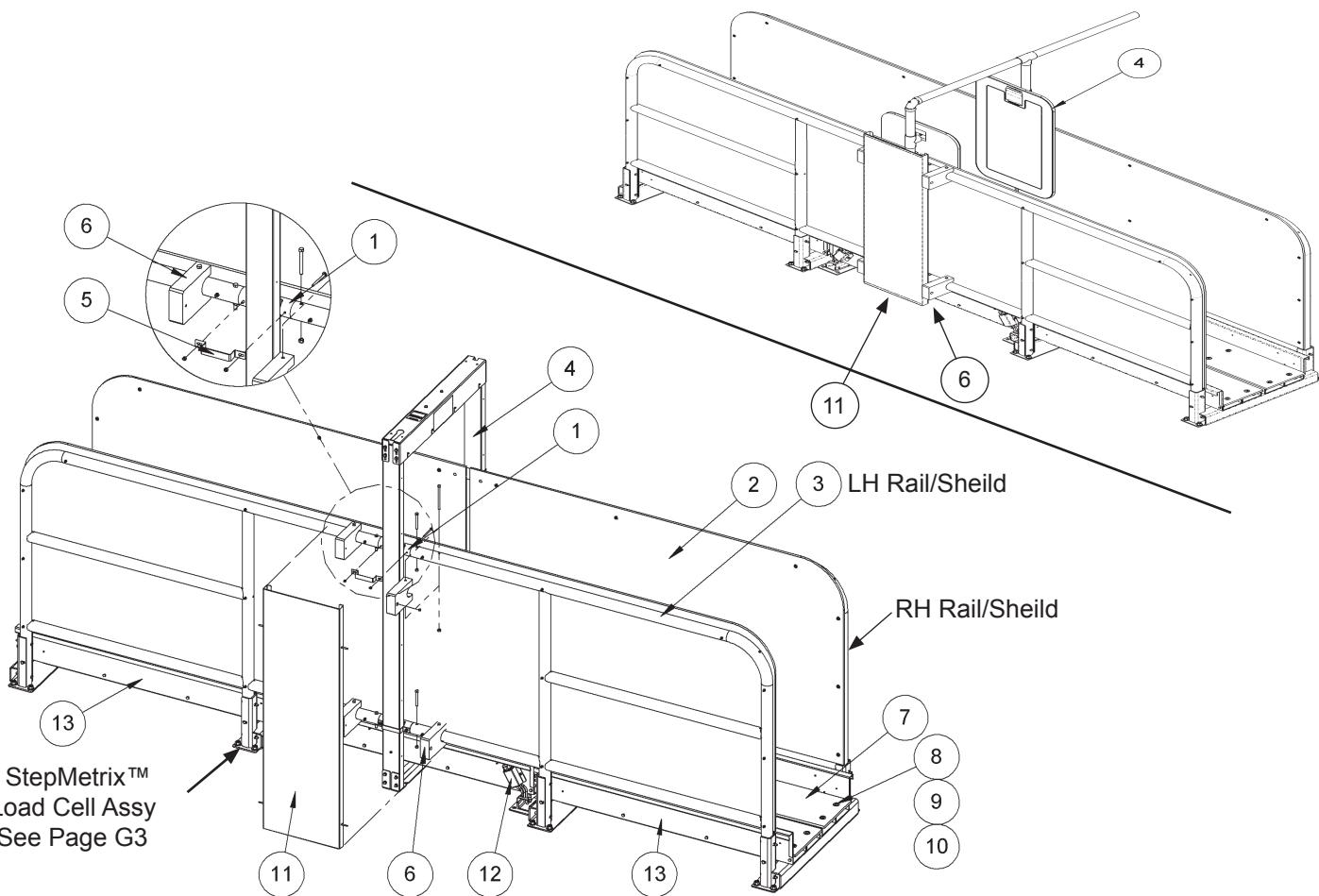


# Exit and Freestall Components

## — Contents —

Description	Page
Cow Brush .....	9-12
Foot Bath Control .....	13
<b>StepGuardian™</b>	
Controller, 2-Bath & 4 Bath .....	7
Dispenser Assembly, Dry Chemical.....	8
Hoofbath Assembly.....	6
Mixing Chamber, 2-Bath & 4-Bath .....	5
<b>StepMetrix™</b>	
Load Cell Assembly .....	3
SMX Score Controller.....	4
Step Sensor Module, Step Down and Up.....	2
<b>FP-1</b>	
Battery Pack .....	31
Charging Connection.....	32
Charging Station.....	33
Electrical Box.....	34
Frame .....	25
Hood .....	27
Magnetic Sensor.....	27
Remote Control .....	25
Rotating Skirt.....	26
Skirt Drive Gear .....	26
Skirt Limiter.....	35
Skirt Motor .....	28
Traction Motor Assembly .....	30
<b>FP-2</b>	
Battery Pack .....	20
Charging Connection.....	21
Charging Station.....	22
Electrical Box.....	23
Frame .....	4
Hood .....	16
Magnetic Sensor.....	18
Remote Control .....	14
Rotating Skirt.....	15
Skirt Drive Gear .....	15
Skirt Limiter.....	24
Skirt Motor .....	17
Traction Motor Assembly .....	19

# Step Sensor Module, Step Down and Step Up StepMetrix™



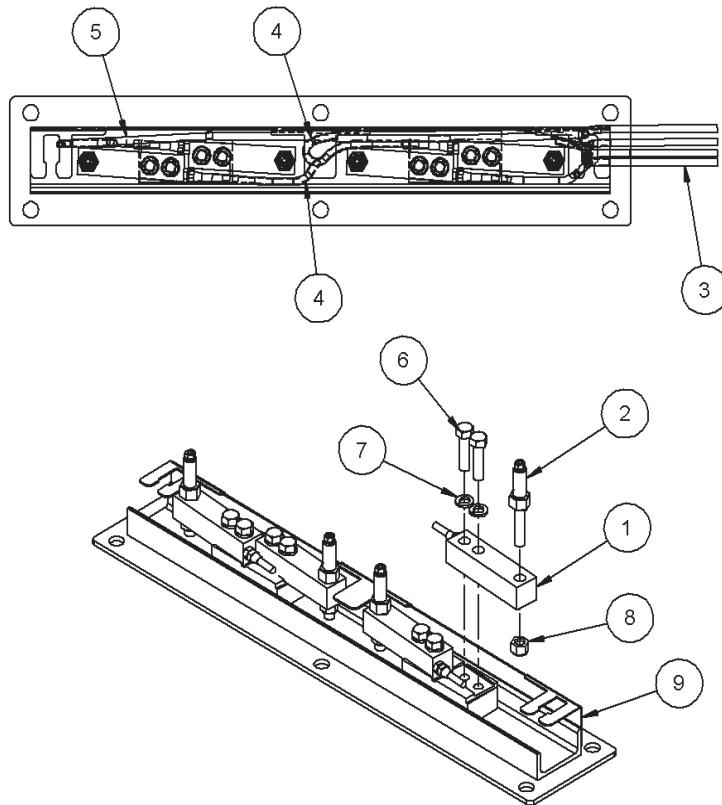
ITEM	PART NO.	DESCRIPTION	QTY REQUIRED (a/t=AS REQUIRED)						
			n/s=NOT SHOWN						
8513353	⊗	Kit, StepMetrix™, Single, Yellow	353						
8513354	⊗	Kit, StepMetrix™, Dual, Yellow		354					
8513355	⊗	Kit, StepMetrix™, Single, Red.			355				
8513356	⊗	Kit, StepMetrix™, Dual, Red.				356			
8580153	⊗	Kit, StepMetrix™, Single, ISO Tag					153		
8580154	⊗	Kit, StepMetrix™, Dual, ISO Tag						154	
1	3558708	Coupling, Rail, StepMetrix™	4	8	4	8	4	8	
2	8513556	Shield, Rails, Polyp, StepMetrix™	4	8	4	8	4	8	
3	8513557	Rail/Shield Assy, LH	2	4	2	4	2	4	
	8514111 <sup>1</sup>	Rail/Shield Assy, RH	2	4	2	4	2	4	
4	3558711	Antenna Assy, StepMetrix™, 34" x 4" (Parts on page F-104)	1	2	1	2	-	-	
	3559085	Antenna, HDPE, 60 x 100 IDO ID	-	-	-	-	2	4	
5	8513558	Bracket, Rail / Antenna	4	8	4	8	-	-	
6	8513559	Bracket, Mount, Antenna Shield	4	8	4	8	4	8	
7	8513322	Pad, Rubber, StepMetrix™	6	12	6	12	6	12	
8	8513344	Washer, Fntr, 0.406 x 1.25 x 0.047 SS	48	96	48	96	48	96	
9	1209388	Washer, Lock, Hlch Spring, SS, 3/8	48	96	48	96	48	96	
10	1013048	Mscr, Bth, SS, 3/8 - 16 x 1	48	96	48	96	48	96	
11	8513560	Shield, StepMetrix™	1	2	1	2	1	2	
12	8513342	⊗ Box, Juction, StepMetrix™	2	4	2	4	2	4	
13	8513321	⊗ Rail, Side, StepMetrix™	6	12	6	12	6	12	
14	0091045	Sftwr, StepMetrix™ 05/2005 - Ver. 1.0	1	1	1	1	1	1	
15	-----	Literature 9E-864 (Installation & Operation Instructions)		ref	ref	ref	ref	ref	

Note:

- Includes rail shield (8513556) & hardware.

# StepMetrix™ Load Cell Assembly

SECTION <b>G</b>	PAGE <b>3</b>
EFFECTIVE: 9/7/05	



ITEM	PART NO.	⊗=OBSOLETE n/s=NOT SHOWN	DESCRIPTION	QTY. REQ. a/r=AS REQ.
	<b>8513348</b> <sup>1</sup>	⊗	<b>Base Assy, W/Load Cells, RH</b>	<b>348</b>
	<b>8513349</b> <sup>1</sup>	⊗	<b>Base Assy, W/Load Cells, LH</b>	<b>349</b>
1	8511761		Load Cell, StepMetrix™	4
2	8513339		Pin Assy, Load Cell, StepMetrix™	4
3	8513345		Conduit, Flex Stall, .25 x 11.00	1
4	8513346		Conduit, Flex Stall, .25 x 25.00	2
5	8513347		Conduit, Flex Stall, .25 x 39.00	1
6	1091551		CSCR, HXH, SS, 1/2 - 20 x 2	8
7	1209390		Washer, Lock, HLCL, SPR, SS 1/2	8
8	1222369		Nut, Lock, Elas, SS 1/2 - 20	4
9	8513314		Base Assy, StepMetrix™	1

Note:

1. Right hand and left hand load cell assemblies are determined by wiring configurations.

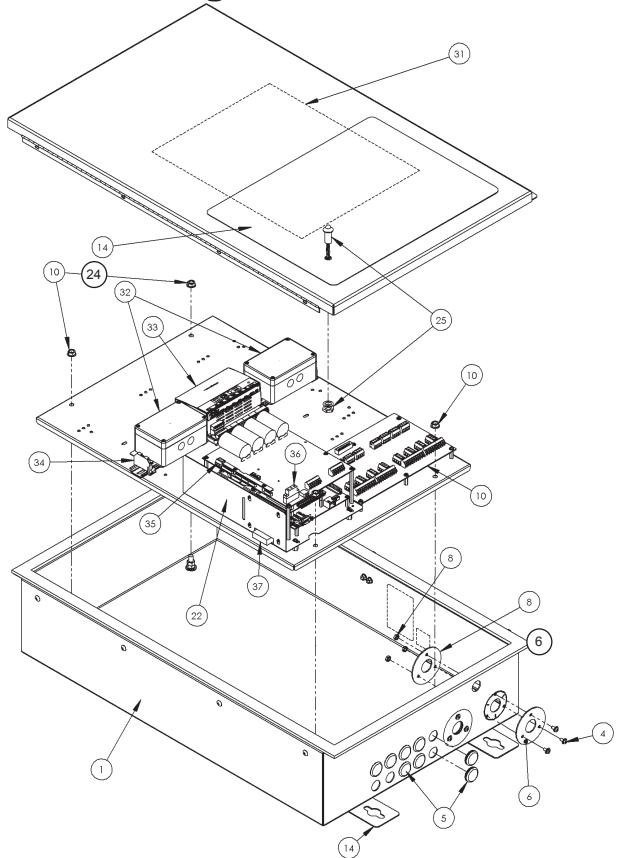
## SMX Score Controller

ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		⊗ = OBSOLETE n/s = NOT SHOWN	a/r = AS REQ.
3558764	⊗	SMX Score Controller (Yellow)	764
3558721	⊗	SMX Score Controller, Intl (red)	721
3559083	⊗	SMX Control Assy, ISO ID (replace w/3559150)	083
3559150		SMX Control Assy, ISO ID	150
1	3558728	Enclosure Assembly	1 1 1
2	3558729	Bracket, Battery	1 1 -
3	1912504	Battery, 6.0V, Lead-Acid	2 2 -
4	1098218	Mscr, Pnh, SS, Sems, 10-32 x 1/2	8 8 6
5	3556157	Grommet, Multiple, 5/32	8 8 8
6	3558758	Cover, Control Box	4 4 4
7	8501363	Keeper, Latch	3 3 -
8	1219380	Nut, Hex, Keps, SS, 10-32	8 8 6
9	1225380	Nut, Hex, Flange, Lock, 10-32, SS	10 10 -
10	1225353	Nut, Hex, Flange, Lock, 5/16-18, SS	4 4 4
11	1098163	Mscr, Pnh, SS, Sems, 6-32 x 3/8	24 24 20
12	1979713	Spacer, Thd, Hex, 6-32 x .75, AL	6 6 6
13	3554987	Cntrl Assy, ID, Intl (Yellow)	1 - -
13	3554988	Cntrl Assy, ID, Intl (Red/Blue)	- 1 -
14	3558735	Bracket, Mount, Control Box	4 4 -
15	4022982	Bushing, Split, Nylon, OCB-875	2 2 -
16	4022038	Nut, Self-Retaining, U-Type, 10-32	4 4 -
17	3558756	Bracket, ID Control	2 2 -
18	3559181	Hard Drive, SMX, Service	1 1 -
18	3561889	Hard Drive, SMX, IDE, G3	1 1 -
19	3558720	Fan, 24V DC, 0.1A	1 1 1
20	1916870	Connector, Plug, VT, 3-Pin x .300	1 1 -
21	1917632	Connector, Terminal Strip, 4-Pos	1 1 -
22	3558925	Electronic Assembly, StepMetrix™	1 1 -
	3561891 <sup>1</sup>	Electronic Assy, SMX, Serv, G3	1 1 -
23	3558769	Label, Wiring, StepMetrix™	1 1 -
23	3559067	Label, Wiring, StepMetrix™	1 1 -
24	3558731	Label, Front, StepMetrix™	1 1 1
25	3558775	LED Indicator Assy, Red/Green/Blue	1 1 1
26	3558724	Pwb Assy, Load Cell	1 1 1
27	3558746	Gasket, Cover, Control Box	1 1 -
28	1096228	Mscr, Pnh, SS, 10-32 x 2 1/2	3 3 -
29	1208384	Washer, Plain, SS, #10	3 3 -
30	1206380	Nut, Wing, SS, 10-32	3 3 -
31	3559092	Label, Wiring, StepMetrix™, ISO, ID	- - 1
32	3559084	Transformer, Antenna	- - 2
33	3559086	Reader Control	- - 1
34	3558274	Bracket, End, Conn	- - 2
35	1917631	Connector, Term Strip	- - 1
36	1916942	Connector, Plug	- - 1
37	3558945	Block Foam	- - 1

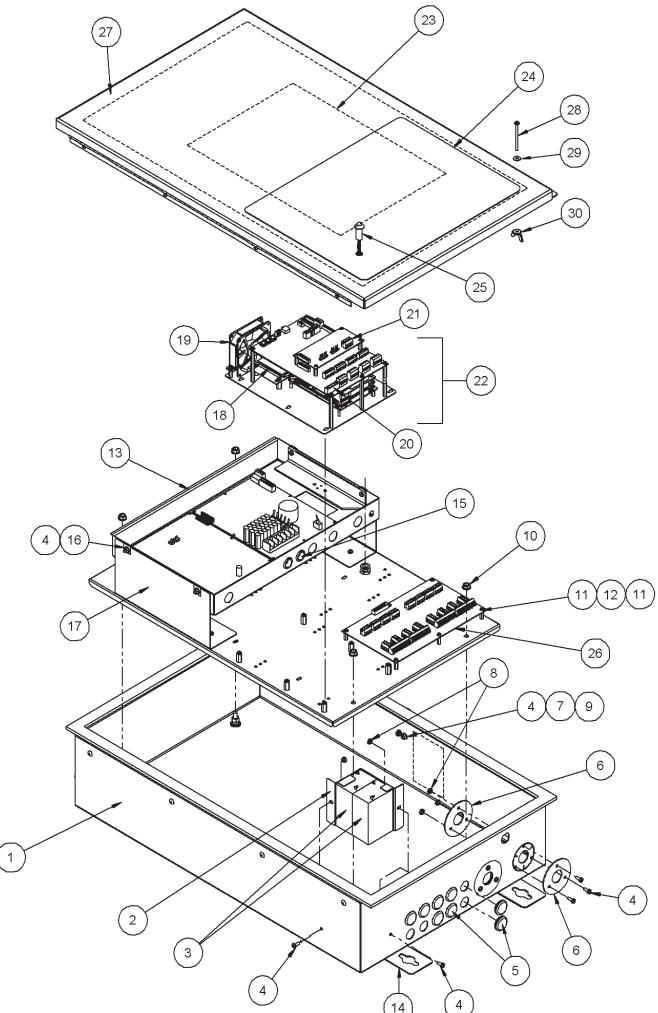
Notes:

1. Includes items 18 & 19

## ISO ID Tag Controller



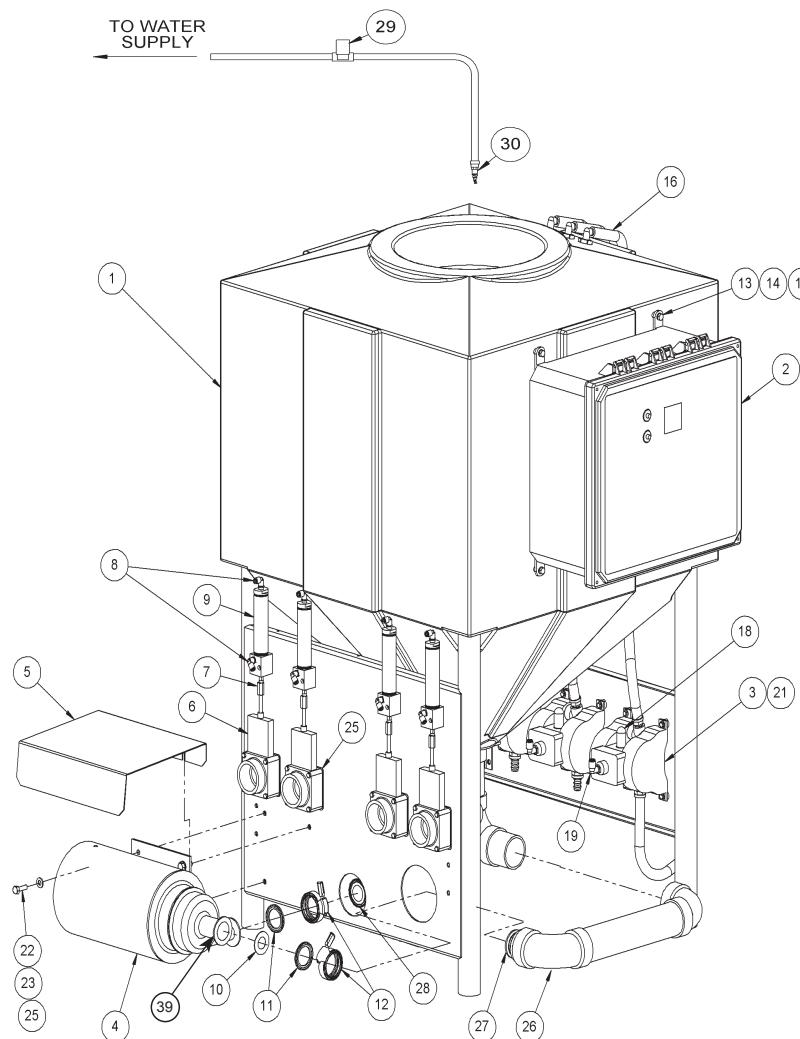
## BouMatic ID Tag Controller



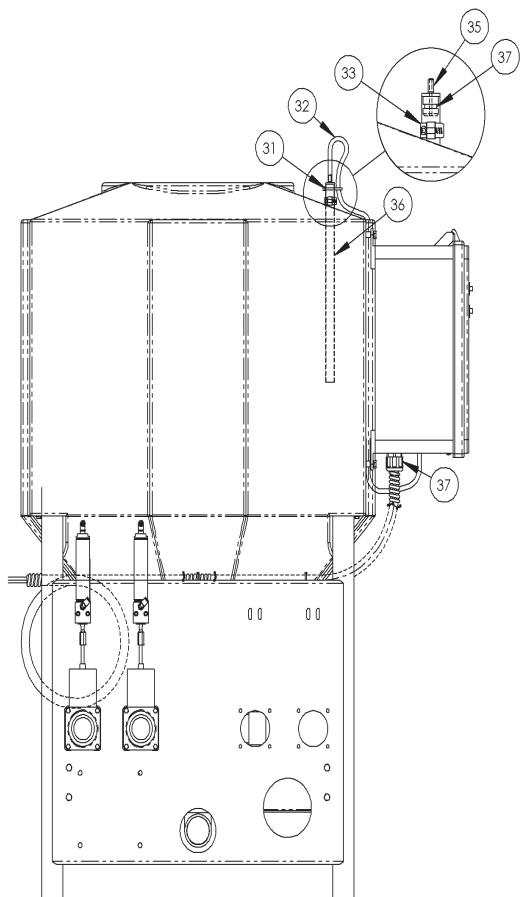
# Mixing Chamber Assy, HB, 2-Bath & 4-Bath

SECTION <b>G</b>	PAGE <b>5</b>
EFFECTIVE: 6/12/19	

4-Bath Mixing Chamber



2-Bath Mixing Chamber



ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		n/s=NOT SHOWN	a/r=AS REQ.

<b>8514351</b>	<b>Mixing Chamber Assy, HB, 2-Bath</b>	<b>351</b>
<b>8514352</b>	<b>Mixing Chamber Assy, HB, 4-Bath</b>	<b>352</b>
1 8514353	Chamber, Mixing, Plastic	1 1
2 3559030	Enclosure Assy, Hoofbath, 2-Bath	1 -
3 3559006	Enclosure Assy, Hoofbath, 4-Bath	- 1
3 8514378 <sup>1</sup>	Pump, Chemical	a/r a/r
4 8516253	Pump, 1HP, 1PH, 230V, 50HZ, CCW	1 1
4 8519970	Pump, 1HP, 1PH, 230V, 60HZ, CCW	1 1
(See parts on page C-30)		
5 8514763	Cover, Pump, Mixing Chamber	1 1
6 3554177	Valve, Gate, 1.5" ID, White	2 4
7 1265352	Nut, Hex, Coupling, 1/4-20x7/8, ZP	2 4
8 3554451	Conn, Swl, Elb, 5/32 OD x 1/8 NPT	4 8
9 3554188	Cylinder, Air, 1.06 x 1.50	2 4
10 8515566	Washer, SS, .406 x 1.62 x .036	1 1
10 8515567	Washer, SS, .656 x 1.62 x .036	1 1
10 8515568	Washer, SS, .844 x 1.62 x .036	1 1
11 8507905	Gasket, Tri-Clamp, 1.5"	2 2
12 8507932	Clamp, Band, SS, 1-1/2	2 2
13 1979611	Spacer, Round, Nylon, .26 x .38 x .38	4 4
14 1209386	Washer, Lock, HLCL, Spring, SS, 1/4	8 8
15 1091010	CSCR, HXH, SS, 1/4 - 20 x 1	4 4
16 8506805	Hose, Vinyl, .38 x .125W, Blk/WHT	a/r a/r
18 8551136 <sup>2</sup>	Muffler, Filter, 1/4 NPT	a/r a/r
19 8507081 <sup>2</sup>	Valve, Control, Flow, 1/4 NPT	a/r a/r
21 8580144	Kit, Repair, Pump, AODD, Chemical (4-Valve Stems, 4-Valve Seats, 4-Springs, 2-Diaphragms, 8-Valve Seat Seals)	a/r a/r

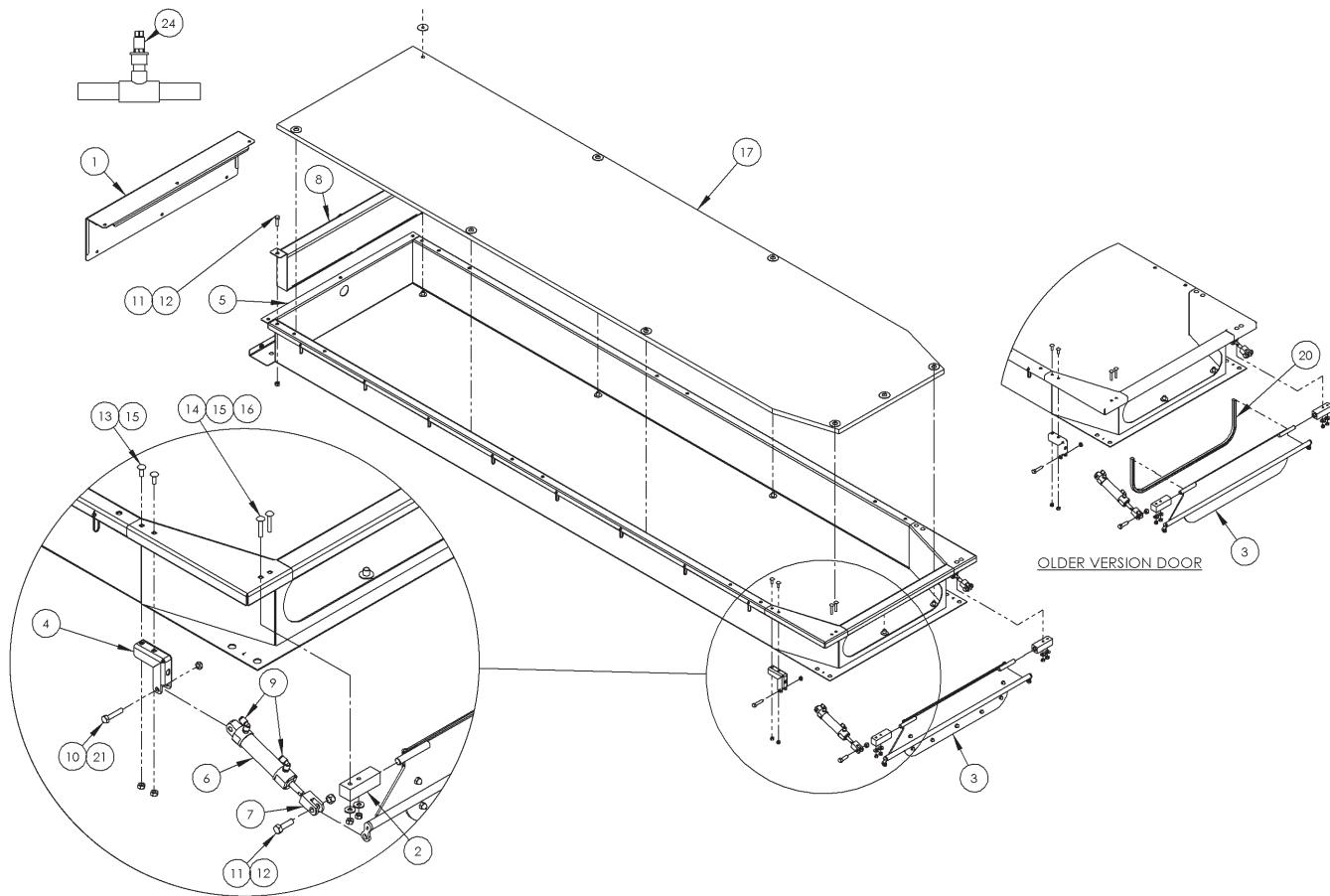
22 1203353	Nut, Hex, SS, 5/16 - 18	4 4
23 1209387	Washer, Lock, HLCL, Spring, SS, 5/16	4 4
24 1208387	Washer, Plain, SS, 5/16	4 4
25 1091029	CSCR, HXH, SS, 5/16 - 18 x 1	4 4
26 8518668	Elbow, 90 Deg, Sch 40, PVC, 2	2 2
27 8514385	Adapter, PVC, Sch-40, 2.0 x 1.5	1 1
28 8514384	Adapter, PVC, Sch-40, 1.5 x 1.5	1 1
29 8514358	Valve, Water	1 1
30 8514359	Nozzle, Spray	1 1
31 1979001	Tie, Cable, 5.87 x .09	10 10
32 8505032	Hose, Vinyl, .19 x .062W, CLR	4 4
33 4012220	Clamp, Hose, SS, #8, .50 - .91	1 1
34 4015689	O-Ring, 0.424 x .103	1 1
35 8505790	Adapter, Tube, Level, Control	1 1
36 8505789	Tube, SS, .750 x .049 x 13.38	1 1
37 3554994	Conn, Str-Rlf, Liq-Tite, HFC 1/2	1 1
38 5100879	Strainer, Foot Valve, Pump, AODD	1 1
39 8581461	Housing, Impeller, N/Finish	ref ref
40 -----	Literature 9E-878	ref ref

(Installation, Operation & Maintenance)

Notes:

1. Standard BouMatic warranty not offered.
2. Items supplied with chemical pump kit (8514364).

# Hoofbath Assy, StepGuardian

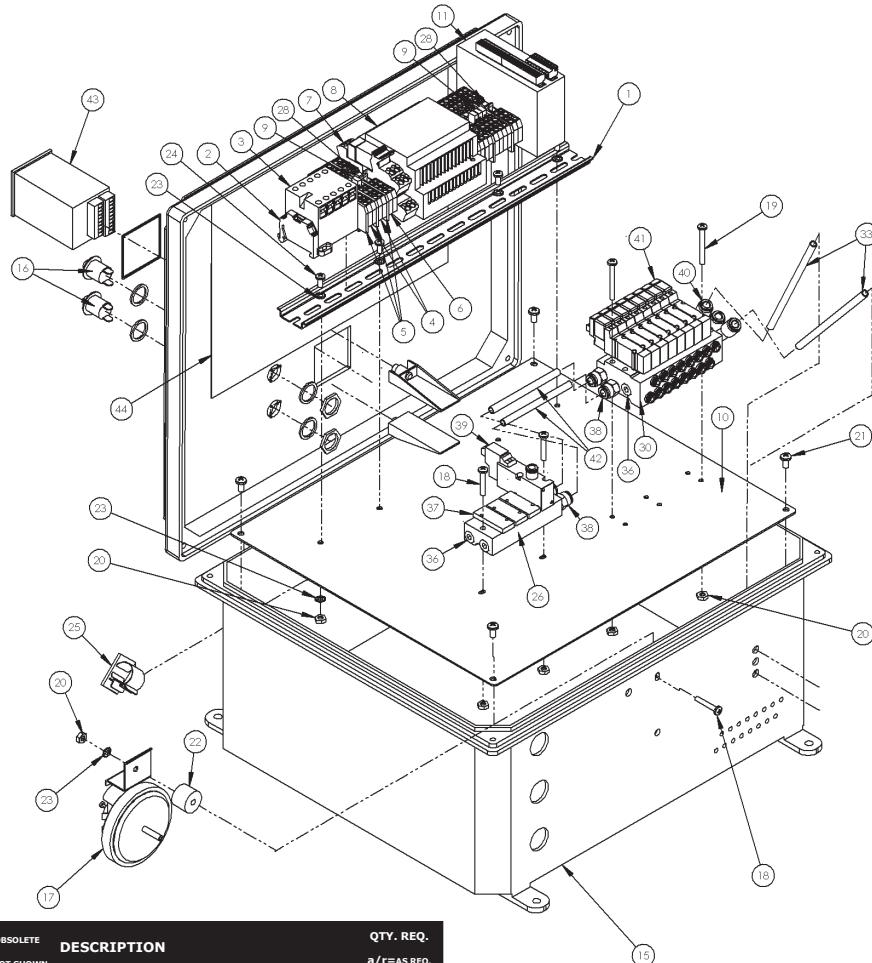


ITEM	PART NO.	DESCRIPTION	QTY. REQ. a/r=AS REQ.
<b>8514377</b>			
1	8514281	Cover, End, Fill, Hoofbath	1
2	8514343	Block, Pivot, Door	2
3	8514344	Door Assy, Hoofbath (old version)	1
	8582279	Door Seal Assy, Mech, Footbath	1
4	8514348	Bracket, MTG, Cylinder, Air	2
5	8514275	Pan Assy, Hoofbath	1
6	8514368	Cylinder, Air, 25 mm x 63 mm	2
7	8514369	Clevis, Air Cylinder	2
8	8514283	Manifold Assy, Hoofbath	1
9	3554451	Conn, SWL, ELB, 5/32, ODX 1/8 NPT	4
10	1091032	CSCR, HXH, SS, 5/16-18 x 1-1/2	2
11	1091050	CSCR, HXH, SS, 3/8-16 x 1-1/4	2
12	1222354	Nut, Lock, Elas, SS, 3/8-16	4
13	1201006	Bolt, CRG, SS, 1/4-20 x 1/2	4
14	1201013	Bolt, CRG, SS, 1/4-20 x 1-1/2	4
15	1222352	Nut, Lock, Elas, SS, 1/4-20	8
16	1208386	Washer, Plain, SS, 1/4 WID A	4
17	8514366	Mat, Rubber, Hoofbath	1
18	1013044	MSCR, BTB, SS, 3/8-16 x 1/2	9
19	8513344	Washer, FNDR, .406x1.250x.047, SS	9
20	8514376 <sup>2</sup>	Gasket, Rubber, W/Adhesive, 31.62	1
	8582278	Seal, Mech, Door, Footbath	1
21	1222353	Nut, Lock, Elas, SS, 5/16-18	2
22	3554174	n/s Hose, Nyn, Blk, 5/32 OD x 100FT	a/r
23	3554439	n/s Hose, Nyn, Red, 5/32 OD x 100FT	a/r
24	8514773	Valve, Check, 1/2 NPT, Bronze	1
25	3558766	n/s Anchor, Floor, Set of 4	1
26	8514367 <sup>1</sup>	n/s Board, Shield, Splash	1
27	8514350 <sup>1</sup>	Bracket, Mtg, Shield, Splash	3
28	-----	Literature 9E-878 (Installation, Operation & Maintenance)	ref

Note:

1. Splash shield (8514367) and bracket (8514350) are sold separate.
2. Gasket (8514376) is used only with older version door assy (8514344).

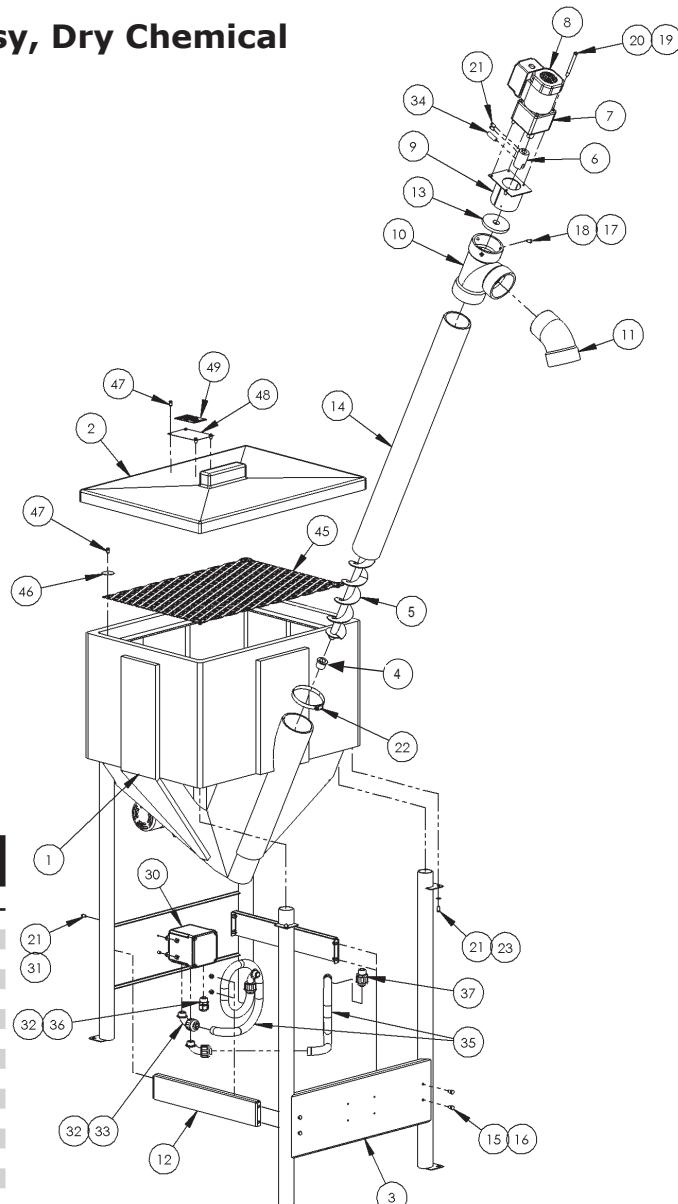
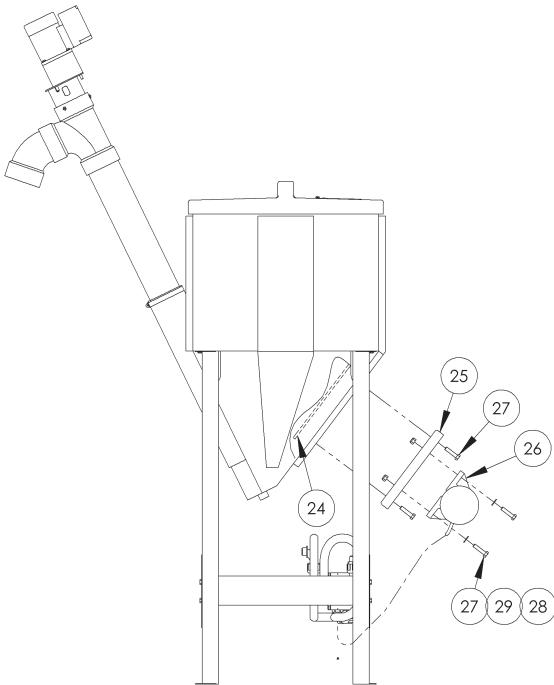
# Controller Assy, 2 & 4 Bath

 SECTION **G** PAGE **7**  
 EFFECTIVE: 4/10/19


ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		n/s=NOT SHOWN	a/r=AS REQ.

<b>3559030</b>	<b>Controller Assy, HB, 2-Bath</b>	<b>030</b>	
<b>3559006</b>	<b>Controller Assy, HB, 4-Bath</b>	<b>006</b>	
1	3557978	Rail, Din, 2M Long x 35mm Wide	a/r a/r
2	3558274	Bracket, End, Conn, Din Rail MTG	2 2
3	3559013	Contactor, 3PH, 1HP, 24VDC	1 1
4	3558253	Connector, PWP, Din Rail MTG	14 14
5	3559012	Barrier, Conn, Din Rail MTG	6 6
6	3559011	Connector, PWR PE, Din Rail MTG	2 2
7	3558987	Relay, w/Baselight, 24VDC, 240VAC	1 1
8	3558993	Power Supply, 24VDC, 85-264AC, 60W	1 1
9	3559007	Connector, Jumper	8 8
10	3559010	Plate Mounting, Hoofbath	1 1
11	3558991	Module, 8IO, 485, Modbus	- 1
12	3558990	Enclosure, Hoofbath, Modified	1 1
13	1980314 <b>X</b>	Switch, PB, SPST, MOM (Replaced 1980311)	2 2
14	1980311	Switch, PB, SPST, MOM	2 2
15	8518190	Switch, Pressure, Fill	1 1
16	1096185	MSCR, PNH, SS, 8-32 X 1	3 3
17	1096188	MSCR, PNH, SS, 8-32 X 1 1/2	2 2
18	1204378	NUT, HEX, MSCR, SS, 8-32	9 9
19	1096216	MSCR, PNH, SS, 10-32 X 3/8	4 4
20	1979606	Spacer, RD, NYL, .20 X .83 X .62	1 1
21	1249383	Washer, Lock, EXT-T, SS, #8, Type A	9 9
22	1096179	MSCR, PNH, SS, 8-32 X 3/5	4 4
23	1914003	Clamp, Cable, 1/2 DIA, ADH	1 1
24	3559046	Manifold, Assy, 3-Way, 4-POS	1 1
25	3559043	Label, Marking, HB	a/r a/r
26	3559018 <b>X</b>	Manifold, 4-Way, 8-POS	- 1
27	3554440	Hose, NYL, Grn, 5/32ODx100FT	a/r -
28	3558982	Plug, 1/8 NPT, Brass	2 1
29	3559021 <b>X</b>	Blank Plate, Manifold, 3-Way	3 -
30	3554087	Conn, Push, 1/4 x 1/8 NPT	2 2
31	3559020	Valve, Solenoid, 3-Way	1 -
32	3554085	Conn, SWL, ELB, 1/4 OD x 1/8 NPT	- 3
33	3558978	Valve, Solenoid, 4-Way	3 8
34	8519183 <b>X</b>	Tube, Nylon, .25 x .035	a/r a/r
35	3560897	Hose, Nylon, 1/4 OD	a/r a/r
36	3559267	PLC, Programmed, FB	1 1
37	3559029	Label Wiring Hoofbath	1 1
38	0090316	Sftwr, StepGuardian Literature 9E-889 (Operation Instructions)	1 1
39	-----		ref ref

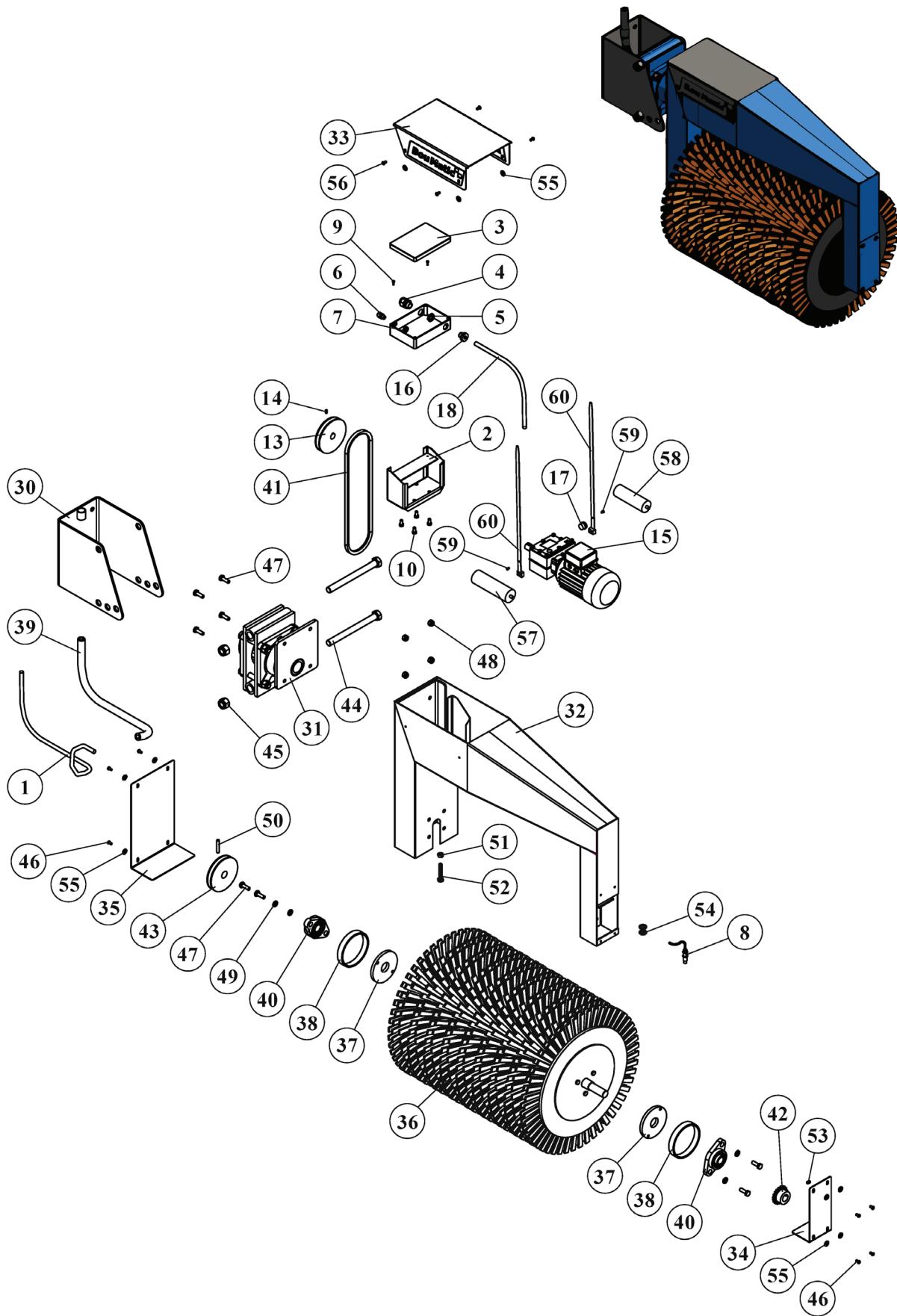
# Dispenser Assy, Dry Chemical



ITEM	PART NO.	DESCRIPTION	QTY. REQ. a/f=AS REQ.
	8514684	Dispenser Assy, Dry Chemical	684
1	8514685	Hopper, Dry Chemical	1
2	8580131	Cover, Hopper, Dry Chemical	1
3	8514948	Leg Assy, Dispenser, Chemical	2
4	8516070	Bearing, Flanged, 1.00OD x .75ID	1
5	8514688	Auger Assy, Dry Chemical	1
6	8514699	Coupling, Drive, Auger	1
7	8514687	Gearbox, 5GU60KA	1
8	8514690	Motor, 1/12HP, 1PH, 230V, 50/60Hz	1
9	8514689	Motor Mount Assy, Drive, Auger	1
10	8514949	Tee, PVC, 3", W/Holes	1
11	8514697	Elbow, Street, 45DEG, SCH40, PVC, 3"	1
12	8514947	Brace, Leg, Dispensing, Chemical	2
13	8514938	Bearing, Top, Auger	1
14	8580133	Pipe, PVC, SCH 40, 3.00 X 36.30	1
15	1094006	MSCR,HXH,SS,1/4-20 X 1/2	8
16	1222352	Nut, Lock, ELAS, SS, 1/4-20	8
17	1249384	Washer, Lock, EXT-T, #6, TYPE A, ZP	3
18	1096218	MSCR,PNH,SS,10-32 X 1/2	3
19	1249386	Washer, Lock, EXT-T, #6, TYPE A, ZP	4
20	1013018	MSCR,BTH,SS,1/4-20 X 3.50	4
21	1094218	MSCR,HXH,SS,10-32 X 1/2	12
22	8500856	Clamp, Hose ,SS, #64, 2.56 X 4.50	1
23	1208384	Washer, Plain, SS, #10	4
24	8580134	Plate, Backup, Vibrator	1
25	8580135	Channel, Vibrator	1
26	8514761	Vibrator, 1PH, 230V, 50/60HZ	1
27	1091051	CSCR,HXH,SS,3/8 X 1-1/2	4
28	1222354	Nut,Lock,ELAS,SS,3/8-16	2
29	1208388	Washer,Plain,SS,3/8 NAR A	2
30	8580441	Enclosure,J-BOX, 3 HOLE	1
31	1222380	Nut,Lock,ELAS,SS,10-24	4
32	1917551	Connector,Dome,Nut,1/2NPT	3
33	3558710	CONN,STR-RLF,L-TITE,ELB,HFC 1/2	3
	4041090	Conn,Cond,90D,HFC, 1/2-90R, GRY	3
34	1293447	Pin, Spring, SS, 3/8 X 1-1/2	1
35	3554995	Conduit, Flex, LIQ-TITE, HFC 2 1/2	2
36	1917532	CONN,STR-RLF,.27-.46,1/2 NPT	1
37	3554994	CONN,STR-RLF,LIQ-TITE,HFC 1/2	1
43	1979001	Tie,Cable,5.87 X .09	4
44	1979008	Tie,Cable,14.50 X .18	2
45	8580431	Guard,Hopper,Chemical	1
46	4022643	Washer,FNDR.,.281 X 1.500 X .047,ZP	4
47	1005275	TFSCR,HXWH,SS,10-16 X 1/2 AB	8
48	8580434	Plate,SS,Sign,3.25 X 5.00	1
49	8518046	Label,Warning,Belt Guard	1
50	3558766	Anchor,Floor,Set of 4	1
51	0203428	Pad,Build-up,3.5 X 3.5 X 32	2
52	0205000	CNTNR,Scored Sheet,28 X 44.13	1
53	0201004	CNTNR,RSC,11 X 8.5 X 4.5	1
54	0205004	CNTNR,TELE,BTM, 52.88 X 30.50 X 5.00	2
55	0205005	CNTNR,TUBE,52.13 X 29.50 X 25.88	1
56	0205006	CNTNR,G-IN,12.25 X 1.13 X 48.00	1

# Cow Brush (120V)

SECTION G	PAGE 9
EFFECTIVE: 1/13/20	

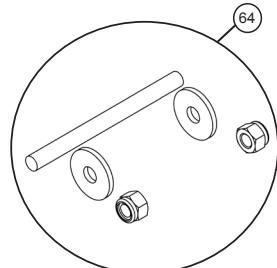
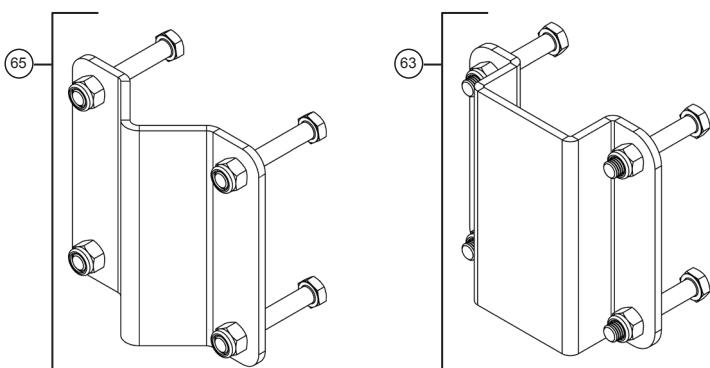
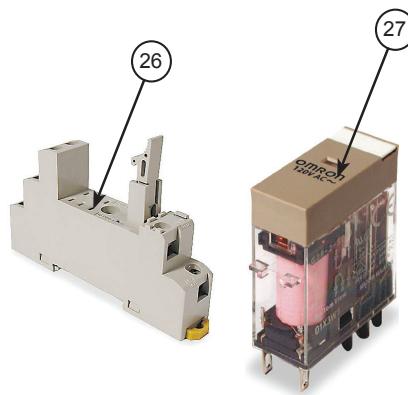


## Cow Brush (120V) (Cont.)

ITEM	PART NO.	DESCRIPTION	QTY. REQ. a/r AS REQ.
	608100230	BOUMATIC COW BRUSH, 120V	0230
1	601225280	3X AWG 14 CABLE, IN METER	1
2	608100355	COW BRUSH,MOTOR PLATE	1
3	608100232	COW BRUSH,TIMER CNTRL BOX,110V	1
4	601229242	COW BRUSH,SCRWD CONN M20	1
5	601229247	UNION NUT F.M20 SCREW. CONNEC-	1
6	601229235	COW BRUSH,SCRWD CONN M12	1
7	601229236	COW BRUSH,UNION NUT M12	1
8	601226402	COW BRUSH,INDUCTIVE SENSOR	1
9	691170307	M4X12 MACHINE SCREW M/CYL.H.	2
10	690470609	M8X16 MACHINE SCREW M. CYL.H.	4
11	601226090	COW BRUSH, NOISE FLTR,RC LED	1
12	601229392	FERRULE 1 MM2 RØD,	1
13	608100034	PULLEY A-SPA 118/1-20-6, COW	1
14	692970507	M6X12 HEX SCREW, DIN 916 A2	1
15	608100231	GEARMOTOR 0,18KW 1X120V, USA	1
16	608100221	GEAR MOTOR 0,18KW 3X240V, USA,	-
17	601225324	PACKING THORSMAN TET 10-14	1
18	601229446	GROMMET M20 CLOSED	1
19	601225290	4X AWG 14 CABLE, IN METER	1
20	601225256	1X2,5 MM2 CABLE GREEN/YELLOW,	1
21	601225262	AWG 18 LEDNING SORT	1
22	694170802	Ø12 WASHER 23,48/13X2,5	1
23	694170303	Ø4 WASHER Ø11,57/4,3X1	1
24	603085255	COW BRUSH, RING CABLE LUG	1
25	603085256	FORK M4/1,5-2,5 Kmm,	1
26	601237047	TAPE, DOUBLESIDED ADHESIVE 12 MM,	1
27	601226006	COW BRUSH,SOCKET,RELAY,2-POL	1
28	601226057	COW BRUSH,RELAY,110V	1
29			
30	608100251	MOUNTING PLATE CPL,HANDY BRUSH	1
31	608100255	BEARING HOUSING CP,HANDY BRUSH	1
32	608100267	COW BRUSH BOX CPL.,HANDY BRUSH	1
33	608100332	TOP PLATE, HANDY BRUSH	1
34	608100334	BOTTOM PLATE FRONT,HANDY BRUSH	1
35	608100335	BASE PLATE BACK, HANDY BRUSH	1
36	608100336	BRUSH SECTION, HANDY BRUSH	1
37	608100352	MOUNT. PLATE F. BRUSHES, HANDY	2
38	608100353	PROTECTION RING F. BRUSHES,	2
39	608100354	PROTECTIVE PIPE FOR CABLE	2
40	608100243	FLANGE BEARING Ø25, 2 HOLES,	1
41	603110203	COW BRUSH,V-BELT A 42	1
42	608100360	COW BRUSH,SPROCKET WHL W/HUB	1
43	608100036	PULLEY A-SPA 118/1-25	1
44	690271248	M20X220 S.S. MACHINE BOLT	2
45	694071205	M20 S.S. LOCKNUT DIN 985	2
46	690670507	M6X12 ALLEN SCREW BH ISO 7380	8
47	690170715	n/s M10X30 S.S. SET SCREW	6
48	694070705	M10 LOCK NUT SS DIN 985-A2	4
49	694170702	COW BRUSH,WASHER 19,48/10,5X2	2
50	601218382	PIN /- PIPE COTTER 8X50 MM,	1
51	694070701	M10 NUT S.S. DIN 934-A2	1
52	690170725	M10X60 S.S. SET SCREW	1
53	692970607	M8X12 HEX SCREW 18/8 DIN 916	1
54	694170802	Ø12 WASHER 23,48/13X2,5	2
55	694170503	Ø6 WASHER 17,57/6,4X1,6 DIN	12
56	690670505	M6X8 ALLEN SCREW BH ISO 7380	4
57	601225731	CAPACITOR 25 $\mu$ F	1
58	601225732	CAPACITOR 20 $\mu$ F	1
59	690570305	M4X8 ALLEN SCREW US DIN 7991	2
60	603600060	CABLE TIE, BLACK 12X500 MM M/HUL	2
61	601225061	TR5 PCB FUSE 5 AT	1
62			
63	608100287	MOUNTING SET,COW BRSH,SQ POST	a/r
64	608100289	BRACKETS,COW BRUSH,WALL MOUNT.	a/r
65	608100288	MOUNTING SET F/PIPE 2"-2 1/2",	1
66	608100229	KIT, SERVICE,CAP.,COW BRUSH120V	a/r

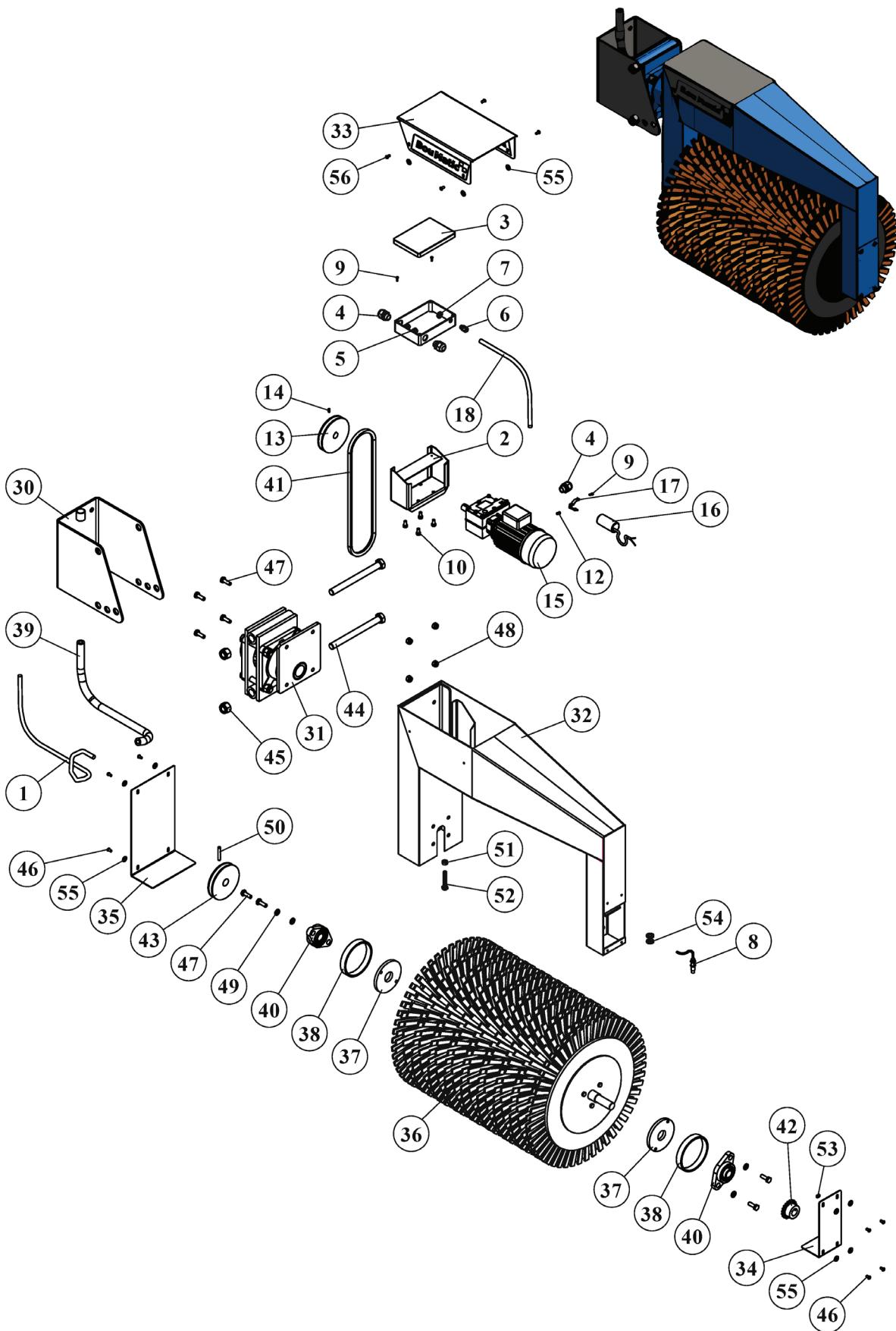
Note:

- Item 3 includes enclosure and board.



# Cow Brush (240V)

SECTION <b>G</b>	PAGE <b>11</b>
EFFECTIVE: 1/13/20	

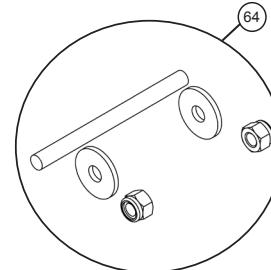
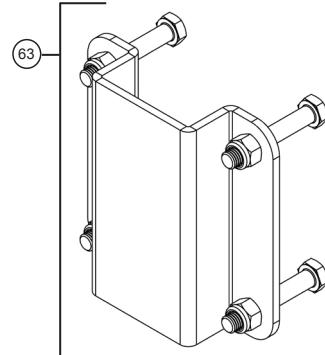
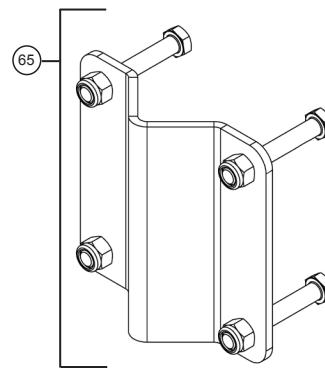


## Cow Brush (240V) (Cont.)

ITEM	PART NO.	DESCRIPTION	QTY. REQ. a/r=AS REQ.
	608100220	BOUMATIC COW BRUSH, 240V	0220
1	601225279	3X AWG 16 CABLE	1
2	608100355	COW BRUSH,MOTOR PLATE	1
3	608100365 1	TIMER-CONTROL W. BOX, 1X230V	1
4	601229242	COW BRUSH,SCRWD CONN M20	1
5	601229247	UNION NUT F.M20 SCREW. CONNEC-	1
6	601229235	COW BRUSH,SCRWD CONN M12	1
7	601229236	COW BRUSH,UNION NUT M12	1
8	601226402	COW BRUSH,INDUCTIVE SENSOR	1
9	691170307	M4X12 MACHINE SCREW M/CYL.H.	2
10	690470609	M8X16 MACHINE SCREW M. CYL.H.	4
11	601226090	COW BRUSH, NOISE FLTR,RC LED	1
12	603618029	M4X11 POP-NUT, UFO 30 S.S.,	1
13	608100034	PULLEY A-SPA 118/1-20-6, COW	1
14	692970507	M6X12 HEX SCREW, DIN 916 A2	1
15	608100221	GEAR MOTOR 0,18KW 3X240V, USA,	1
16	601225717	COW BRUSH,CAPCITOR, MKA 450 12	1
17	601225718	COW BRUSH, CAPACITOR CLIP	1
18	601225289	4X AWG 16 CABLE	1
19	601229391	COW BRUSH, FERRULE .75 MM2	1
20	601229393	COW BRUSH, FERRULE,2.5 MM2	1
21	694170802	Ø12 WASHER 23,48/13X2,5	1
22	694170303	Ø4 WASHER Ø11,57/4,3X1	1
23	603085255	COW BRUSH, RING CABLE LUG	1
24	603085073	COW BRUSH, COUPLING SLV	1
25	603600048	CABLE TIE T30R NATUR., MAX.Ø35	1
26			
27			
28			
29			
30	608100251	MOUNTING PLATE CPL,HANDY BRUSH	1
31	608100255	BEARING HOUSING CP,HANDY BRUSH	1
32	608100267	COW BRUSH BOX CPL.,HANDY BRUSH	1
33	608100332	TOP PLATE, HANDY BRUSH	1
34	608100334	BOTTOM PLATE FRONT,HANDY BRUSH	1
35	608100335	BASE PLATE BACK, HANDY BRUSH	1
36	608100336	BRUSH SECTION, HANDY BRUSH	1
37	608100352	MOUNT. PLATE F. BRUSHES, HANDY	2
38	608100353	PROTECTION RING F. BRUSHES,	2
39	608100354	PROTECTIVE PIPE FOR CABLE	2
40	608100243	FLANGE BEARING Ø25, 2 HOLES,	1
41	603110203	COW BRUSH,V-BELT A 42	1
42	608100360	COW BRUSH,SPROCKET WHL W/HUB	1
43	608100036	PULLEY A-SPA 118/1-25	1
44	690271248	M20X220 S.S. MACHINE BOLT	2
45	694071205	M20 S.S. LOCKNUT DIN 985	2
46	690670507	M6X12 ALLEN SCREW BH ISO 7380	8
47	690170715	n/s	
48	694070705	M10X30 S.S. SET SCREW	6
49	694170702	M10 LOCK NUT SS DIN 985-A2	4
50	601218382	COW BRUSH,WASHER 19,48/10,5X2	2
51	694070701	PIN /- PIPE COTTER 8X50 MM,	1
52	690170725	M10 NUT S.S. DIN 934-A2	1
53	690170725	M10X60 S.S. SET SCREW	1
54	692970607	M8X12 HEX SCREW 18/8 DIN 916	1
55	694170802	Ø12 WASHER 23,48/13X2,5	2
56	694170503	Ø6 WASHER 17,57/6,4X1,6 DIN	12
57	690670505	M6X8 ALLEN SCREW BH ISO 7380	4
58			
59			
60			
61	601225061	TR5 PCB FUSE 5 AT	1
62			
63	608100287	MOUNTING SET,COW BRSH,SQ POST	a/r
64	608100289	BRACKETS,COW BRUSH,WALL MOUNT.	a/r
65	608100288	MOUNTING SET F/PIPE 2"-2 1/2",	1
66	601225717	CAPACITOR, COW BRUSH, 12.5 UF	1

Note:

1. Item 3 includes enclosure and board.



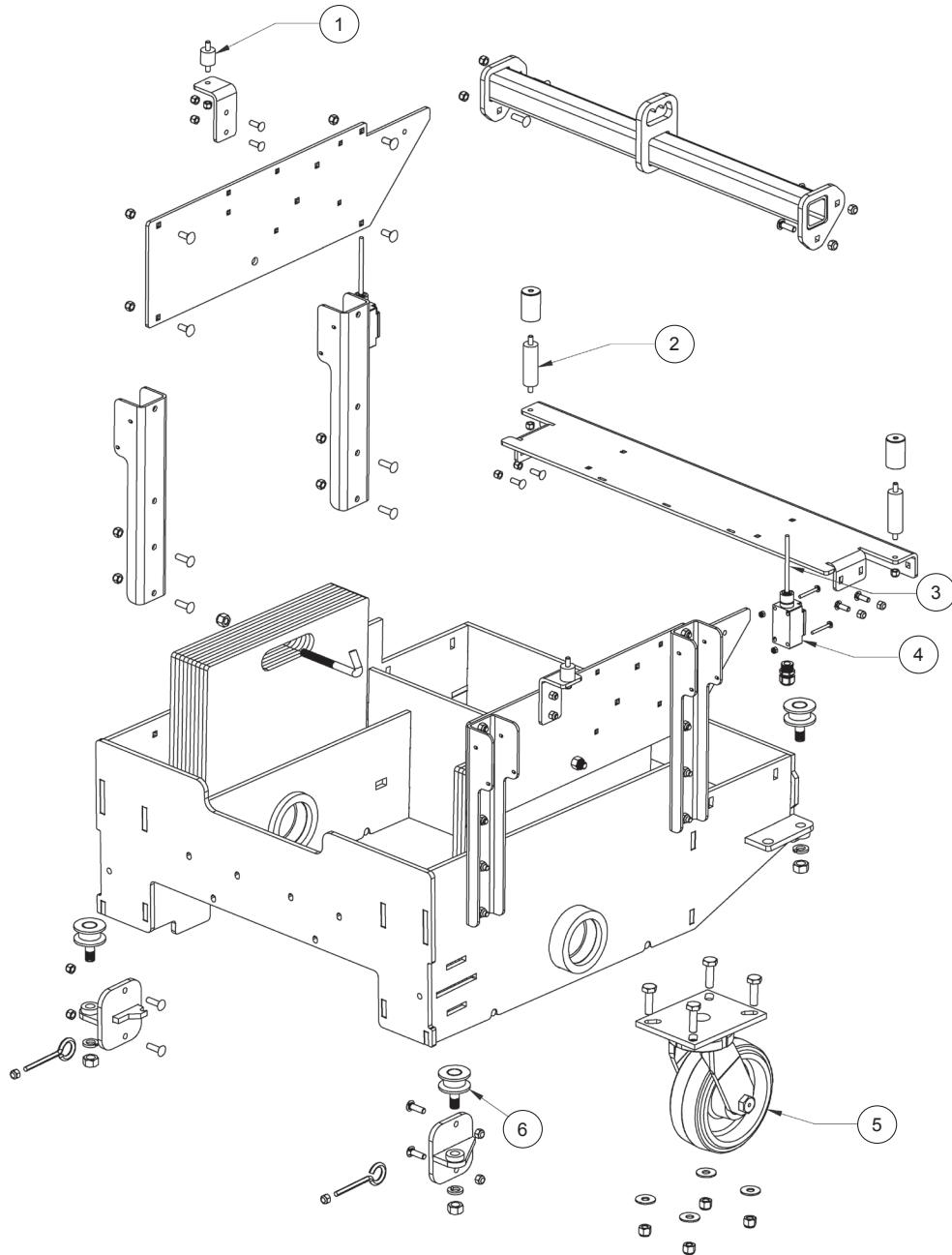
# Foot Bath Control

SECTION	PAGE
G	13
EFFECTIVE:	5/16/19



ITEM	PART NO.	DESCRIPTION	QTY. REQ. a/r=AS REQ.
1	3563555	RELAY,OUTPUT MODULE 8 POINT	a/r
2	3563556	BATTERY,CR2354,3V,LITHIUM	a/r
3	3563557	PLC,CLICK,ETHERNET BASIC, 24V	a/r
4	3563558	TOUCH SCREEN, HMI, 6INCH	a/r
5	3563559	CABLE, RS232	a/r
6	3563560	PILOT LIGHT,RED,FB	a/r
7	3563561	PILOT LIGHT,BLUE,FB	a/r
8	3563562	PILOT LIGHT,GREEN,FB	a/r
9	3563563	CONNECTOR ASSY W/ LEAD WIRE	a/r

## FP-2 Frame



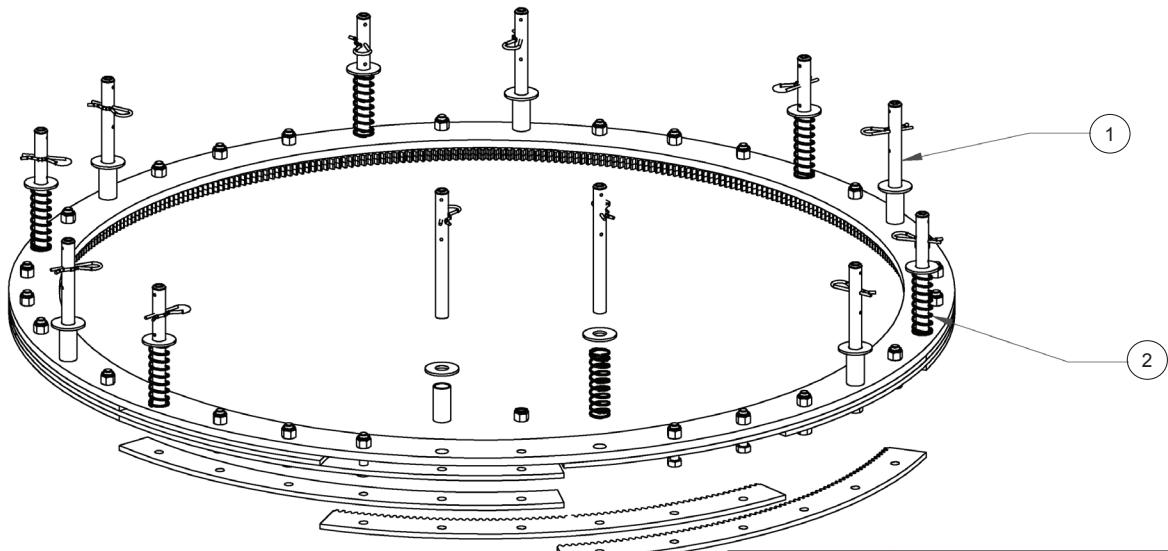
ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		n/s=NOT SHOWN	a/r=AS REQ.
<b>FP-2 FRAME</b>			
-	-	-	-
1	8593060	FP-1, ANTI-VIB BLOC, 5/16X18 X1'	a/r
2	8593059	FP-1, ANTI-VIB BLOC, 3X5/16X18	a/r
3	8593346	FEED PUSHER LIMIT SWITCH	a/r
4	8593065	FP-1, LIMIT SWITCH STOP	a/r
5	8593052	FP-1, ROUE SWIVEL 8" X 3",	a/r
6	8593046	FP-1, CAM FOLLOWER FLANGED	a/r

## FP-2 Remote Control

ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		n/s=NOT SHOWN	a/r=AS REQ.
<b>FP-2 FRAME</b>			
1	8593064	FP-1, JOYSTICK, 5 PSTN	a/r

# FP-2 Skirt Drive Gear

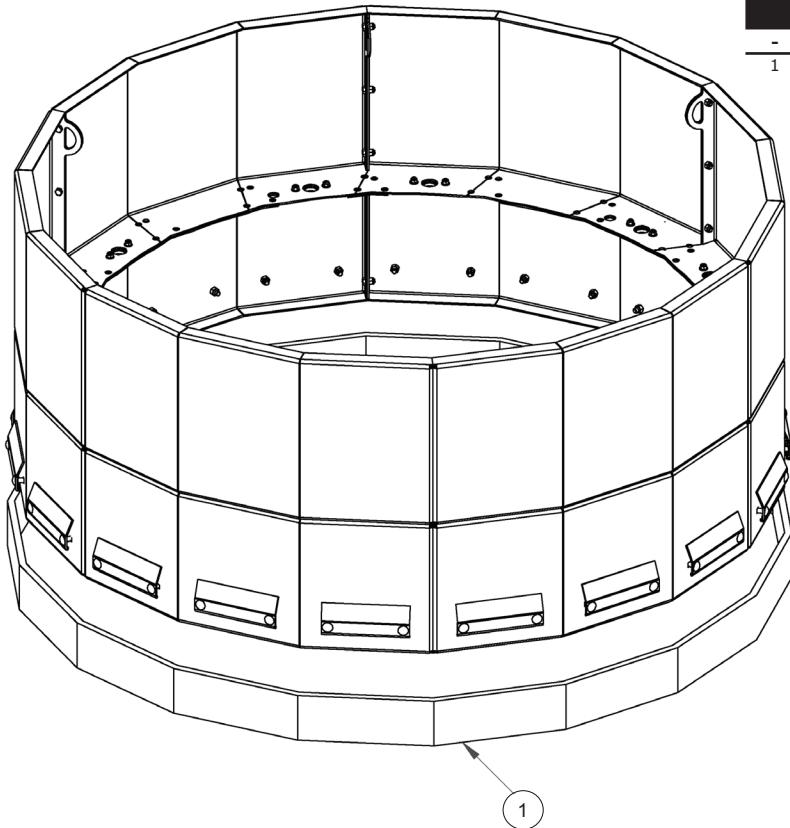
SECTION <b>G</b>	PAGE <b>15</b>
EFFECTIVE: 6/4/19	



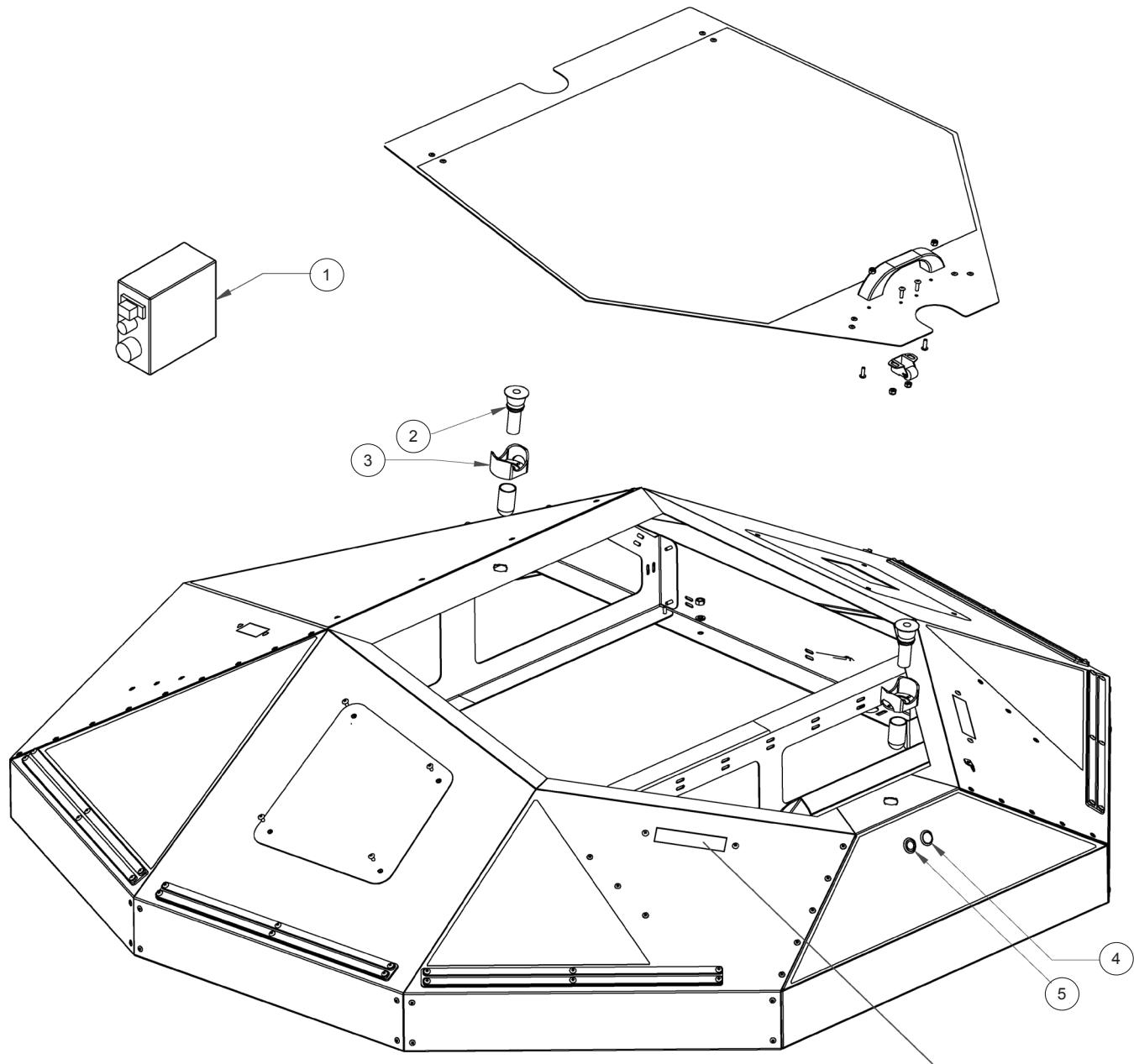
ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		⊗=OBsolete n/s=NOT SHOWN	a/r=AS REQ.
-	-----	<b>FP-2 SKIRT DRIVE GEAR</b>	-
1	8593599	FP-2,DRIVING ROD	a/r
2	8593598	FP-2, SPRING	a/r

# FP-2 Rotating Skirt

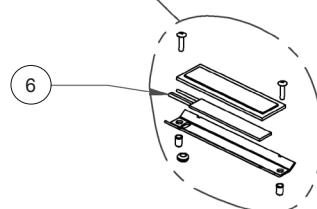
ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		⊗=OBsolete n/s=NOT SHOWN	a/r=AS REQ.
1	8593600	<b>FP-2 ROTATING SKIRT</b>	-
		FP-2,SKIRT	a/r



## FP-2 Hood

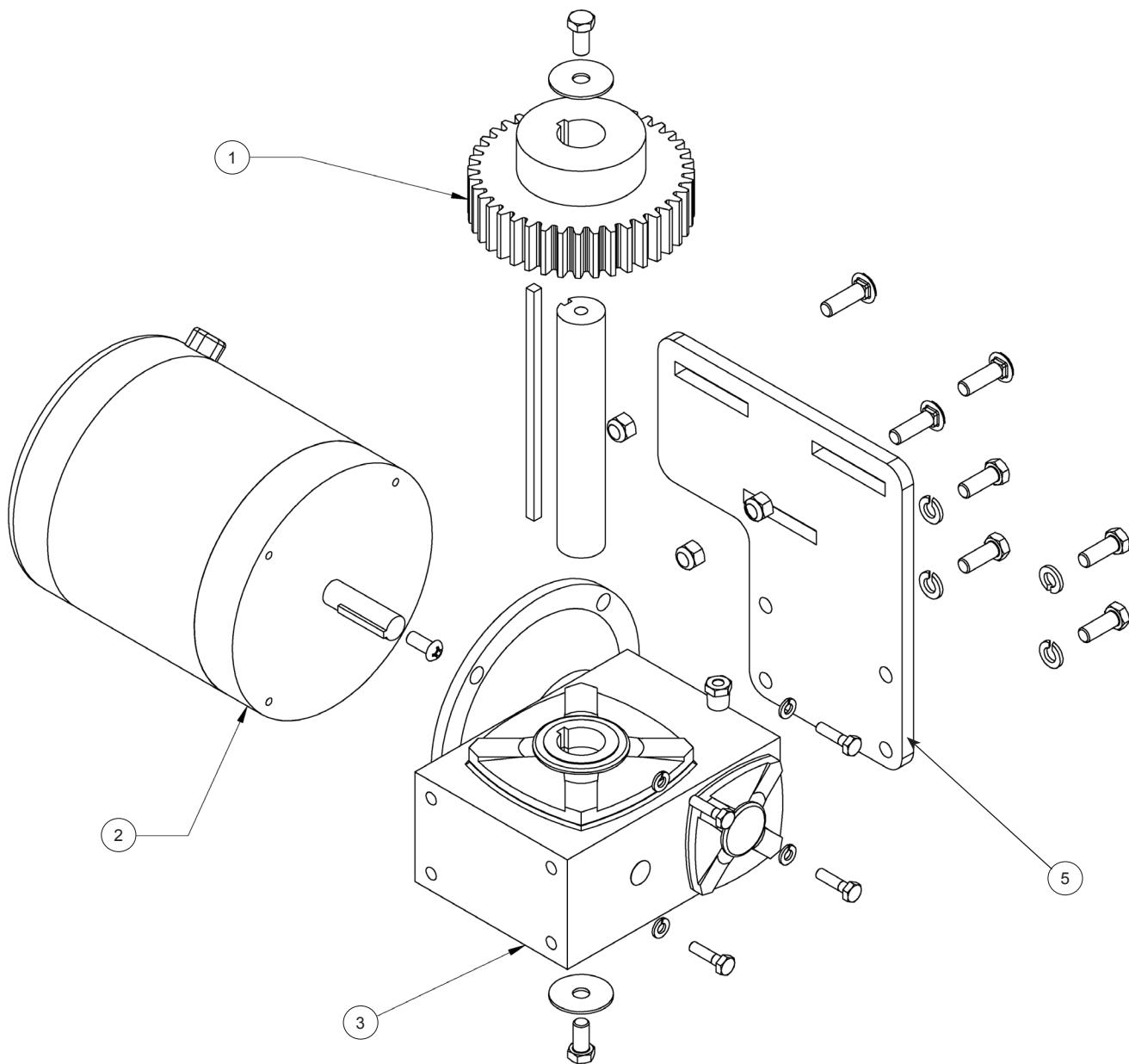


ITEM	PART NO.	DESCRIPTION	QTY. REQ.
n/s=NOT SHOWN			
		<b>FP-2 HOOD</b>	
1	8593606	FEED PSHR SHOCKER	a/r
2	8593067	FP-1, EMERGENCY STOP BUTTON	a/r
3	8593349	FEED PUSHER, E-BUTTON COVER	a/r
4	8593347	PUSHER,PUSHBTN CONTACT,NOT MTN	a/r
5	8593350	PUSHER,PUSH BTN CONTACT MTN	a/r
6	8593351	FEED PUSHER LED	a/r



# FP-2 Skirt Motor

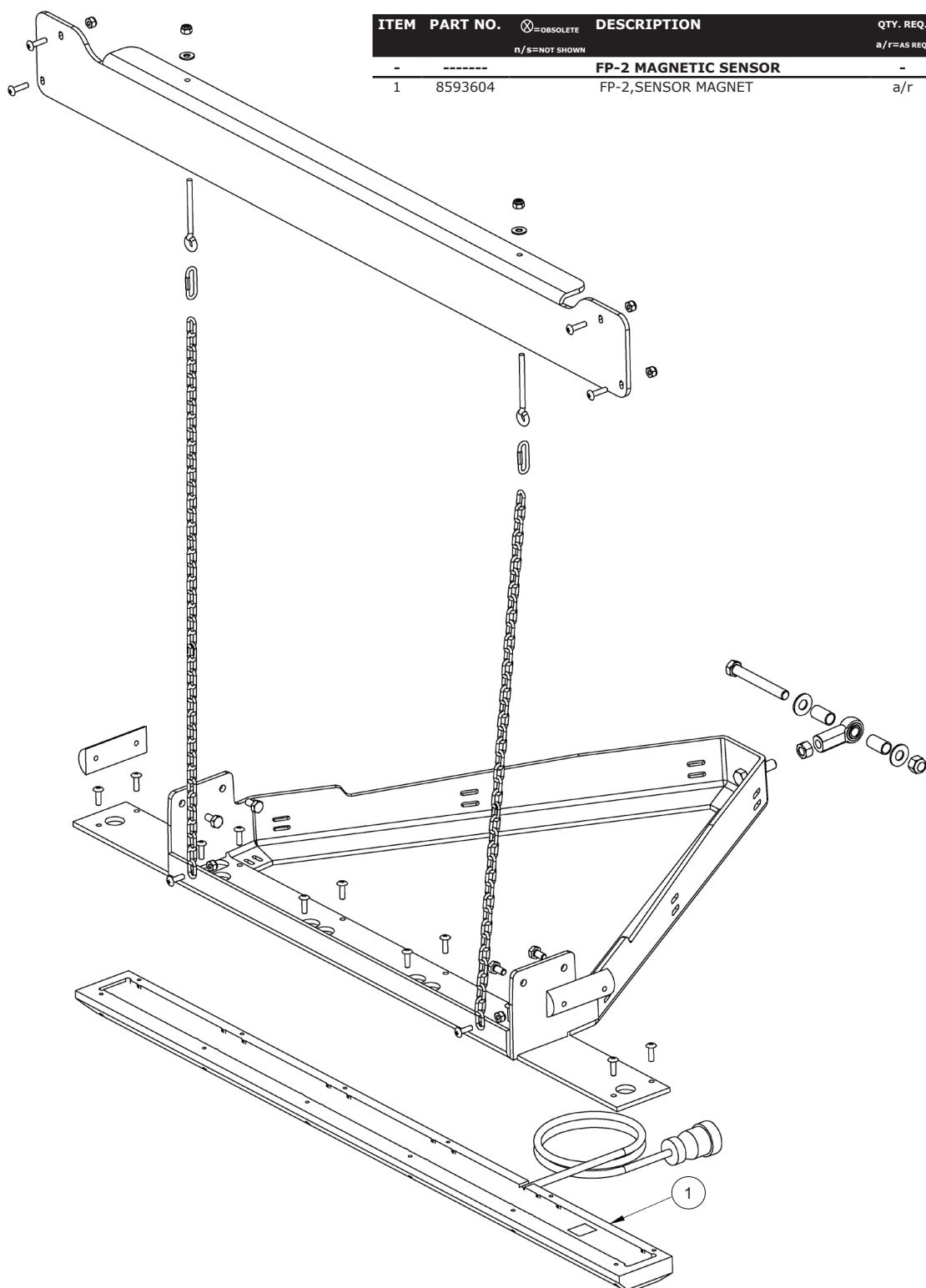
SECTION <b>G</b>	PAGE <b>17</b>
EFFECTIVE: 11/19/19	



ITEM	PART NO.	DESCRIPTION	QTY. REQ. a/r AS REQ.
n/s=NOT SHOWN			
-	-----	<b>FP-2 SKIRT MOTOR</b>	-
1	8593602	FP-2,TUB SPROCKET	a/r
2	8593056	FP-1, MTOR,.5 HP,320 RPM,24VDC	a/r
3	8593042	FP-1, REDUCER CC60-15H, 1-1/8	a/r
4	8593055	n/s FP-1, BRUSH	a/r
5	8594469	FP-2,SKRT MOTOR MOUNTING PLATE	a/r

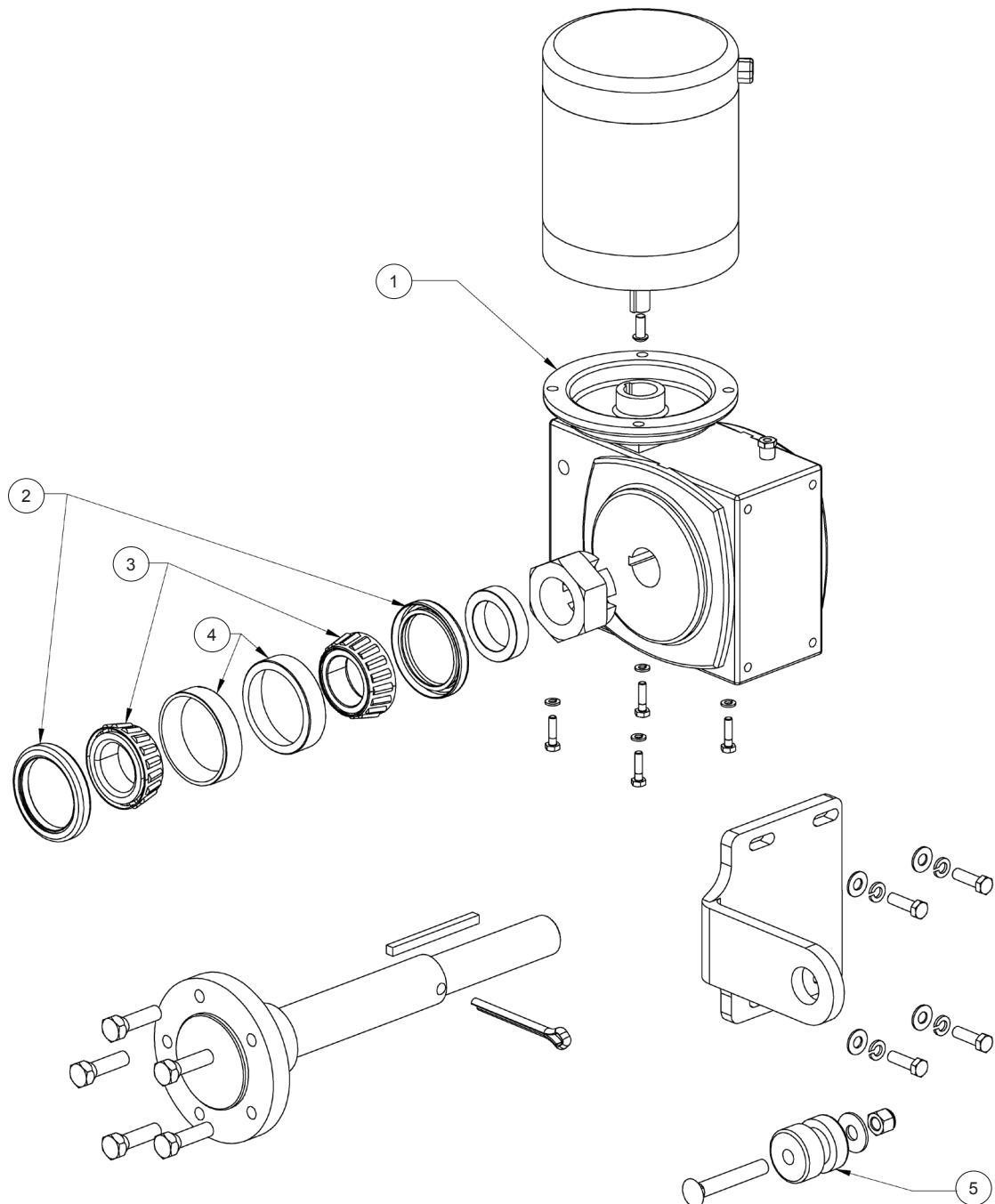
## FP-2 Magnetic Sensor

ITEM	PART NO.	DESCRIPTION	QTY. REQ.
1	8593604	FP-2,SENSOR MAGNET	a/r



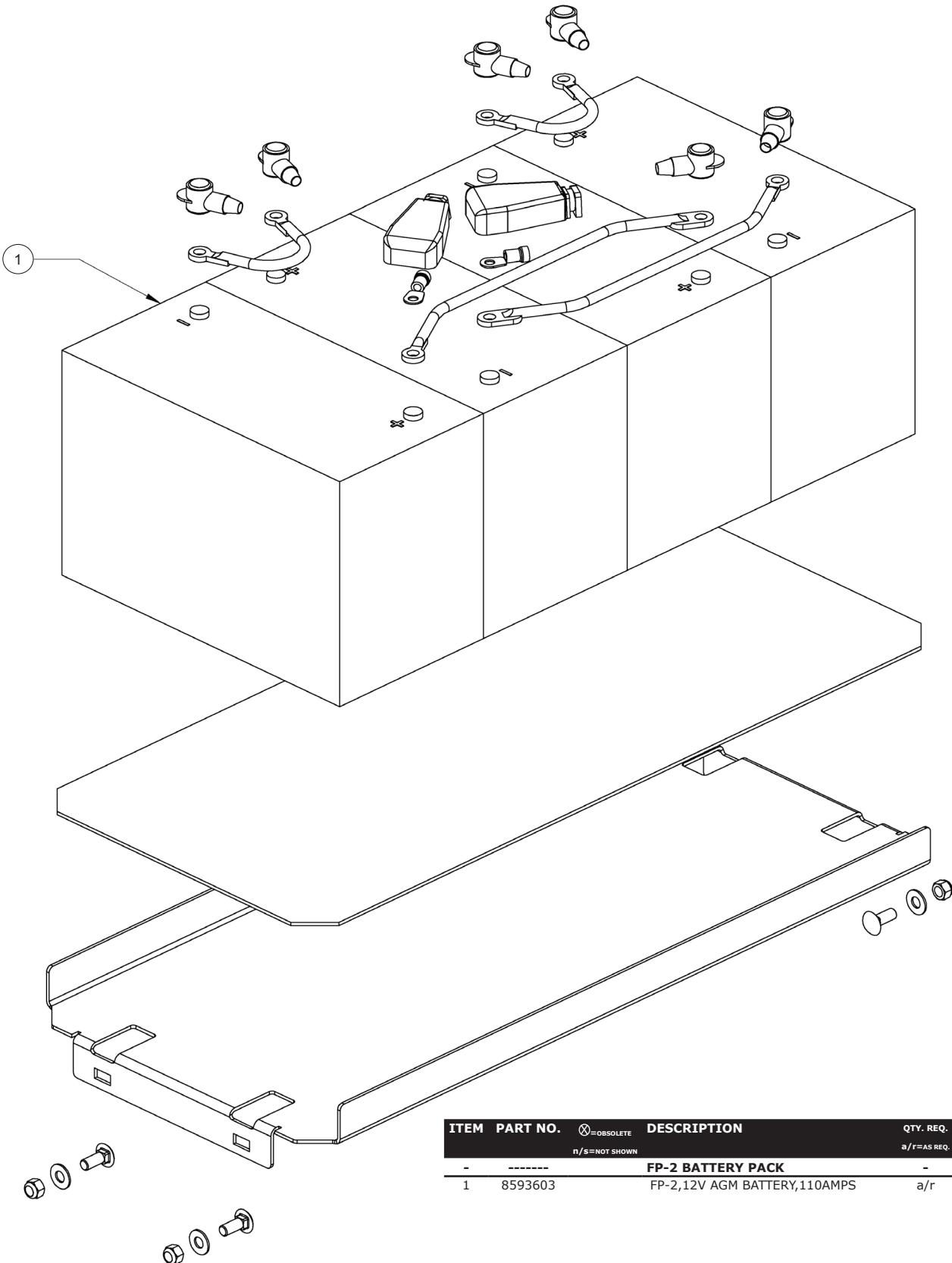
# FP-2 Traction Motor Assembly

SECTION <b>G</b>	PAGE <b>19</b>
EFFECTIVE: 2/1/19	



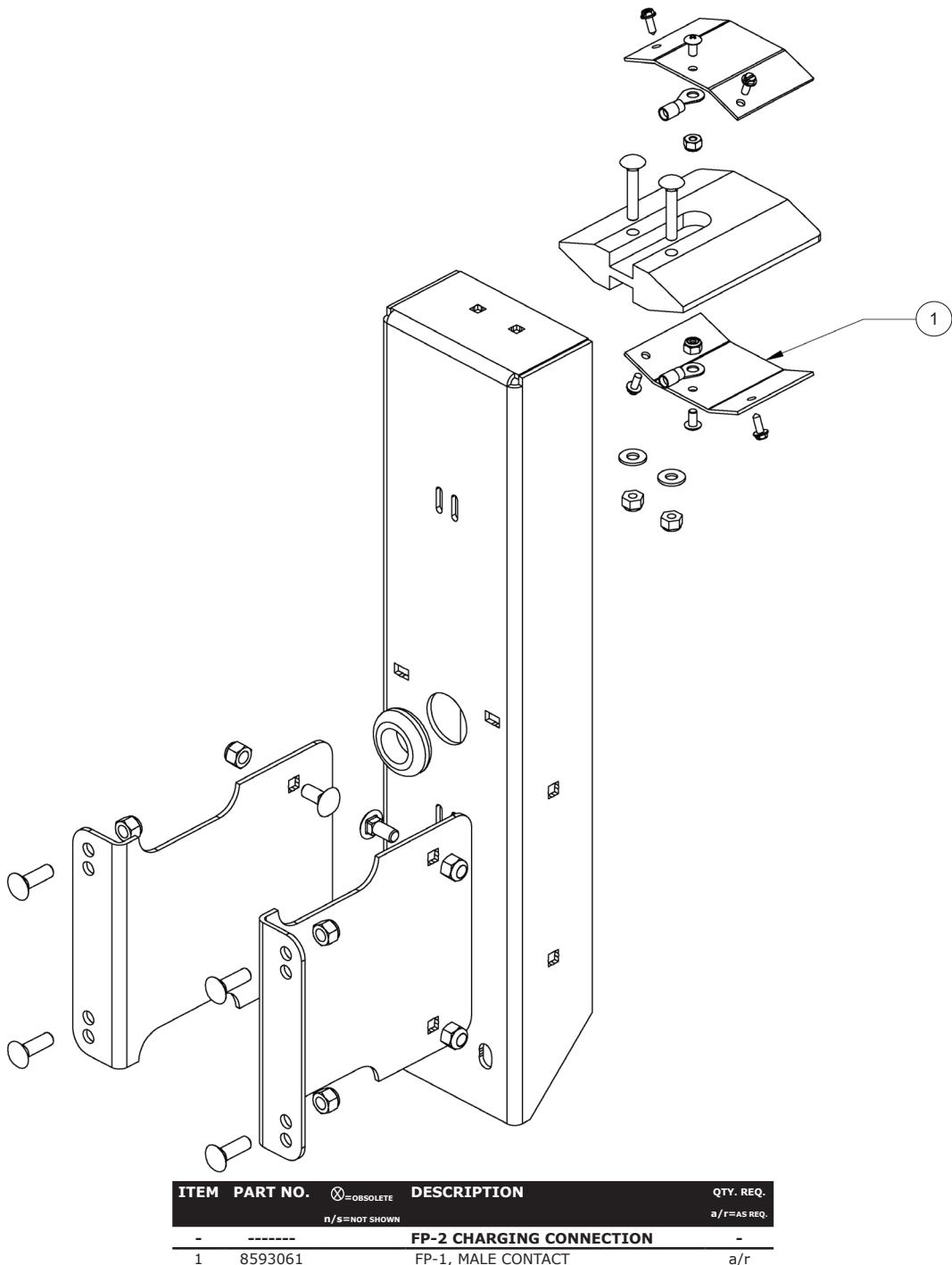
ITEM	PART NO.	DESCRIPTION	QTY. REQ.
-	<b>8593056</b>	FP-1, MOTOR,.5HP,320 RPM,24VDC	-
1	8593597	FP-2, GEAR BOX	a/r
2	8593594	FP-2, OIL SEAL	a/r
3	8593596	FP-2, ROLLER BEARING	a/r
4	8593595	FP-2, ROLLER BEARING SMTH	a/r
5	8593344	FEED PUHSER,VIBRATION DAMPING	a/r

## FP-2 Battery Pack

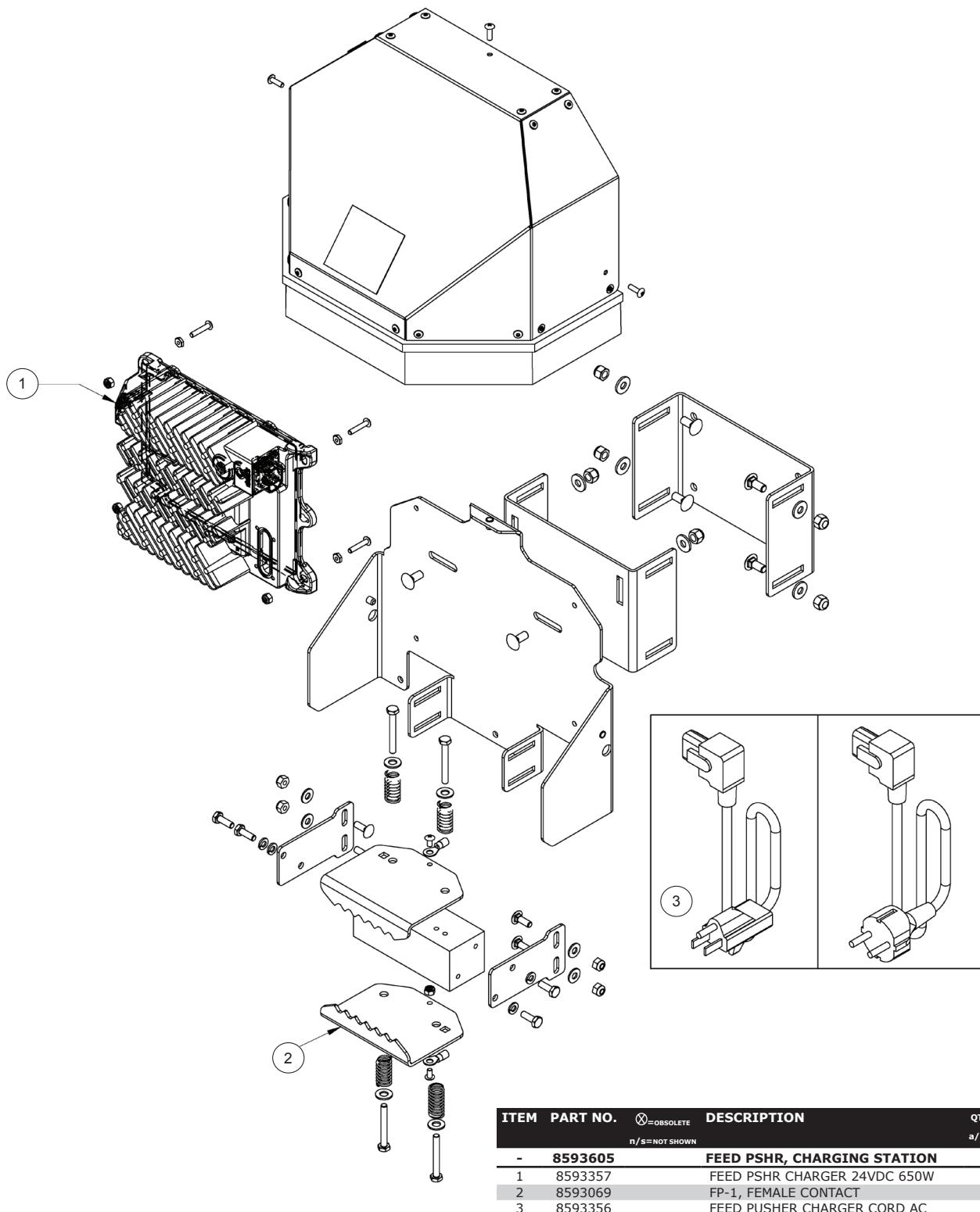


## FP-2 Charging Connection

SECTION <b>G</b>	PAGE <b>21</b>
EFFECTIVE: 12/5/18	



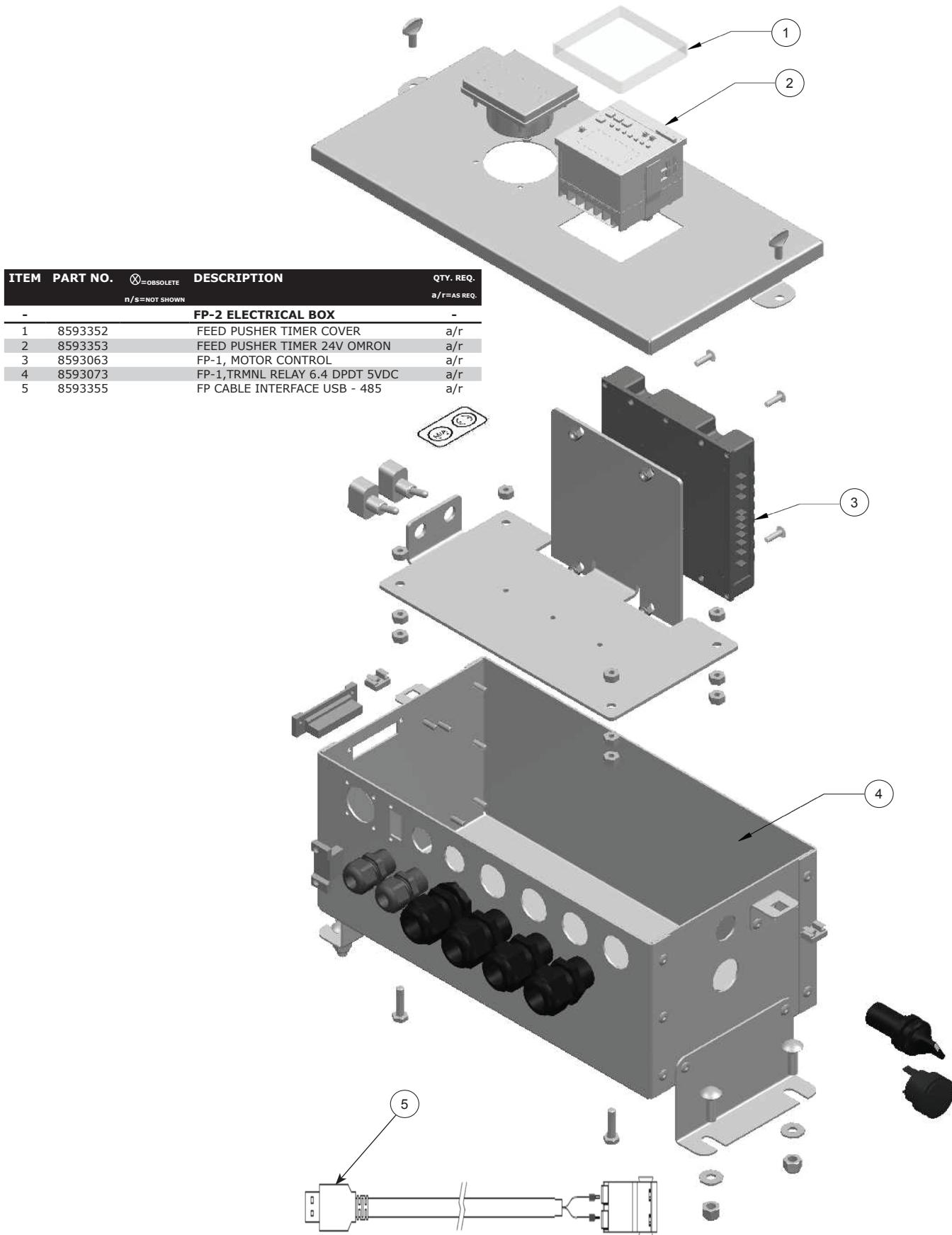
## FP-2 Charging Station



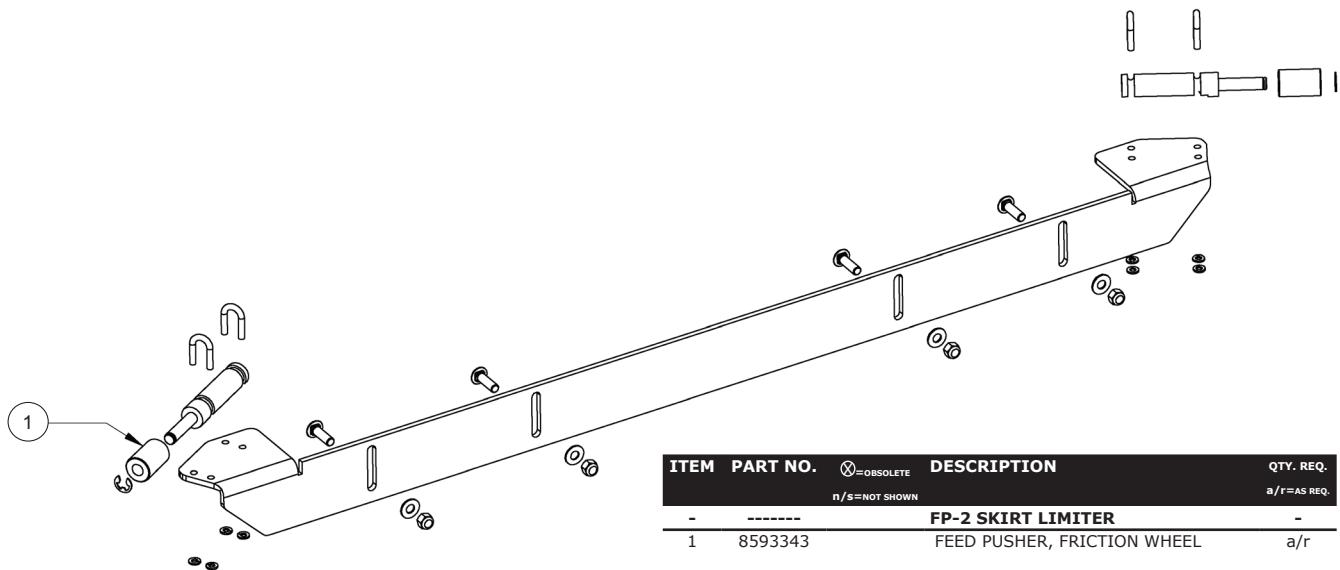
ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		⊗=OBSOLETE n/s=NOT SHOWN	a/r=AS REQ.
-	<b>8593605</b>	<b>FEED PSHR, CHARGING STATION</b>	-
1	8593357	FEED PSHR CHARGER 24VDC 650W	a/r
2	8593069	FP-1, FEMALE CONTACT	a/r
3	8593356	FEED PUSHER CHARGER CORD AC	a/r

# FP-2 Electrical Box

SECTION <b>G</b>	PAGE <b>23</b>
EFFECTIVE: 12/5/18	

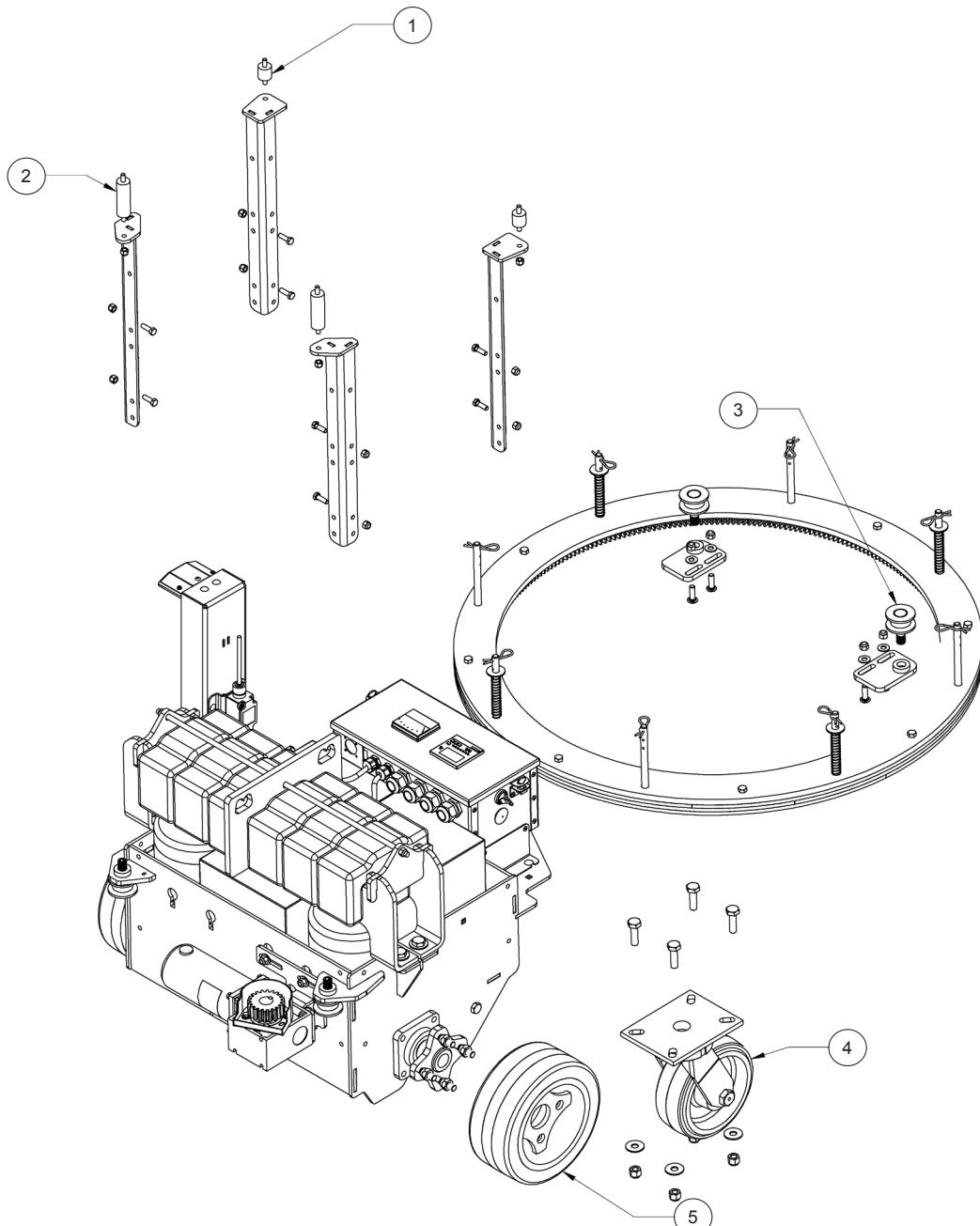


## FP-2 Skirt Limiter



# FP-1 v2 Frame

SECTION <b>G</b>	PAGE <b>25</b>
EFFECTIVE: 11/19/19	

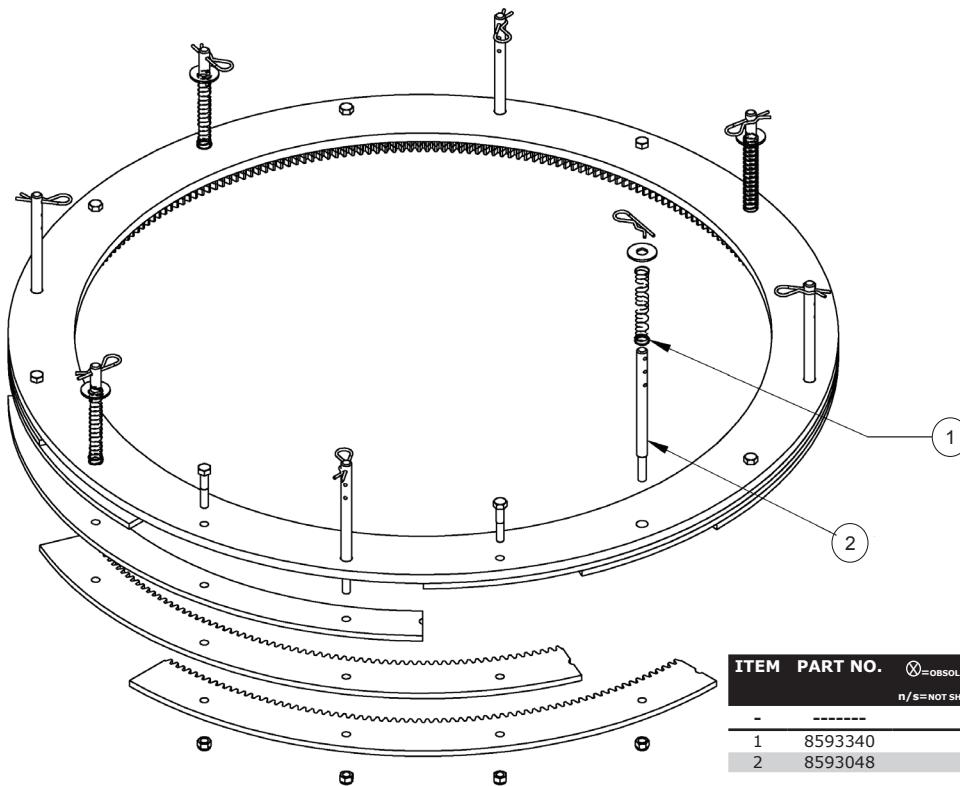


ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		n/s=NOT SHOWN	a/r=AS REQ.
<b>FP-1 FRAME</b>			
1	8593059	FP-1, ANTI-VIB BLOC, 3X5/16X18	a/r
2	8593060	FP-1, ANTI-VIB BLOC, 5/16X18 X1'	a/r
3	8594470	FP-2, CAM FOLLOWER FLNGD, HD STL	a/r
4	8593052	FP-1, ROUE SWIVEL 8" X 3",	a/r
5	8593051	FP-1, TRACTION WHEEL	a/r

## FP-2 Remote Control

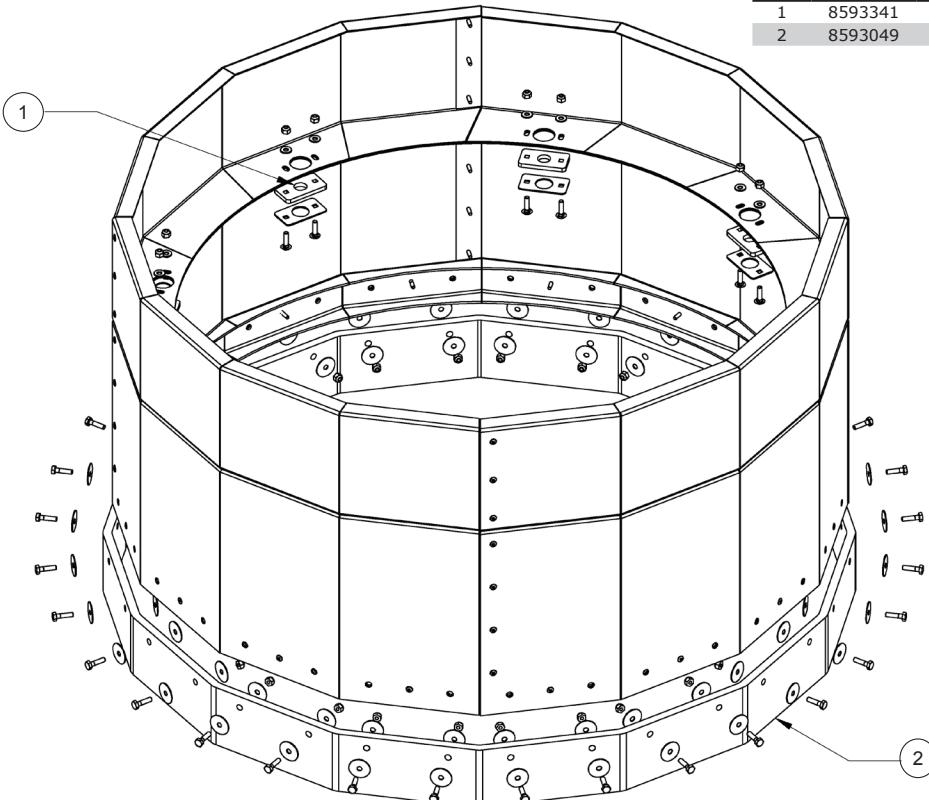
ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		n/s=NOT SHOWN	a/r=AS REQ.
<b>FP-2 FRAME</b>			
1	8593064	n/s FP-1, JOYSTICK, 5 PSTN	a/r

## FP-1 v2 Skirt Drive Gear



ITEM	PART NO.	DESCRIPTION	QTY. REQ.
n/s=NOT SHOWN			
<b>FP-1 SKIRT DRIVE GEAR</b>			
1	8593340	FEED PUSHER, SPRING 5/8 X 4"	a/r
2	8593048	FP-1, ROD	a/r

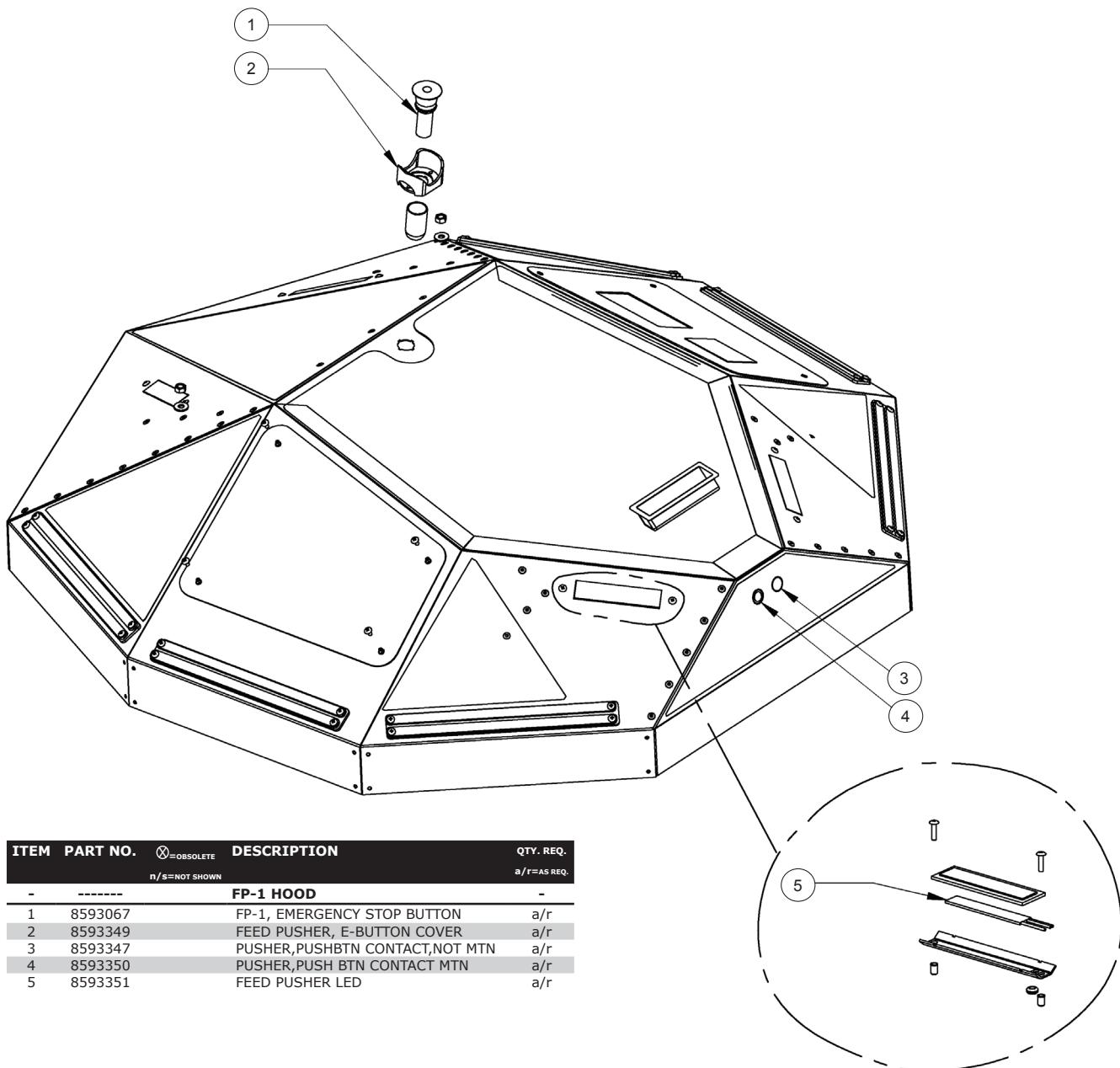
## FP-1 v2 Rotating Skirt



ITEM	PART NO.	DESCRIPTION	QTY. REQ.
n/s=NOT SHOWN			
<b>FP-1 ROTATING SKIRT</b>			
1	8593341	FEED PUSHER, WEAR PLATE	a/r
2	8593049	FP-1, SKIRT	a/r

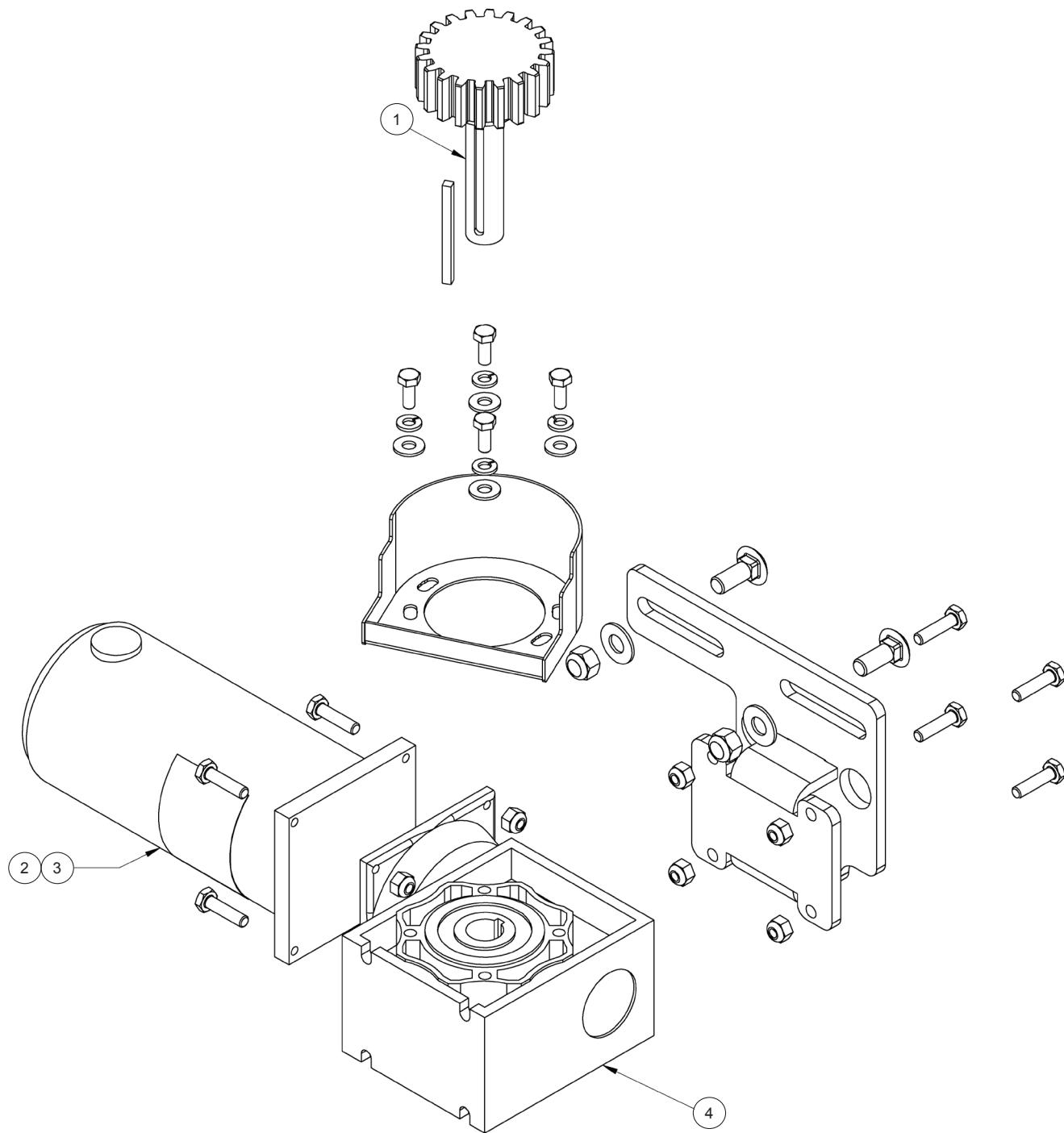
# FP-1 v2 Hood

SECTION <b>G</b>	PAGE <b>27</b>
EFFECTIVE: 12/11/18	



ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		⊗=OBSOLETE	
	n/s=NOT SHOWN		a/r=AS REQ.
-	-----	<b>FP-1 HOOD</b>	-
1	8593067	FP-1, EMERGENCY STOP BUTTON	a/r
2	8593349	FEED PUSHER, E-BUTTON COVER	a/r
3	8593347	PUSHER,PUSHBTN CONTACT,NOT MTN	a/r
4	8593350	PUSHER,PUSH BTN CONTACT MTN	a/r
5	8593351	FEED PUSHER LED	a/r

## FP-1 v2 Skirt Motor

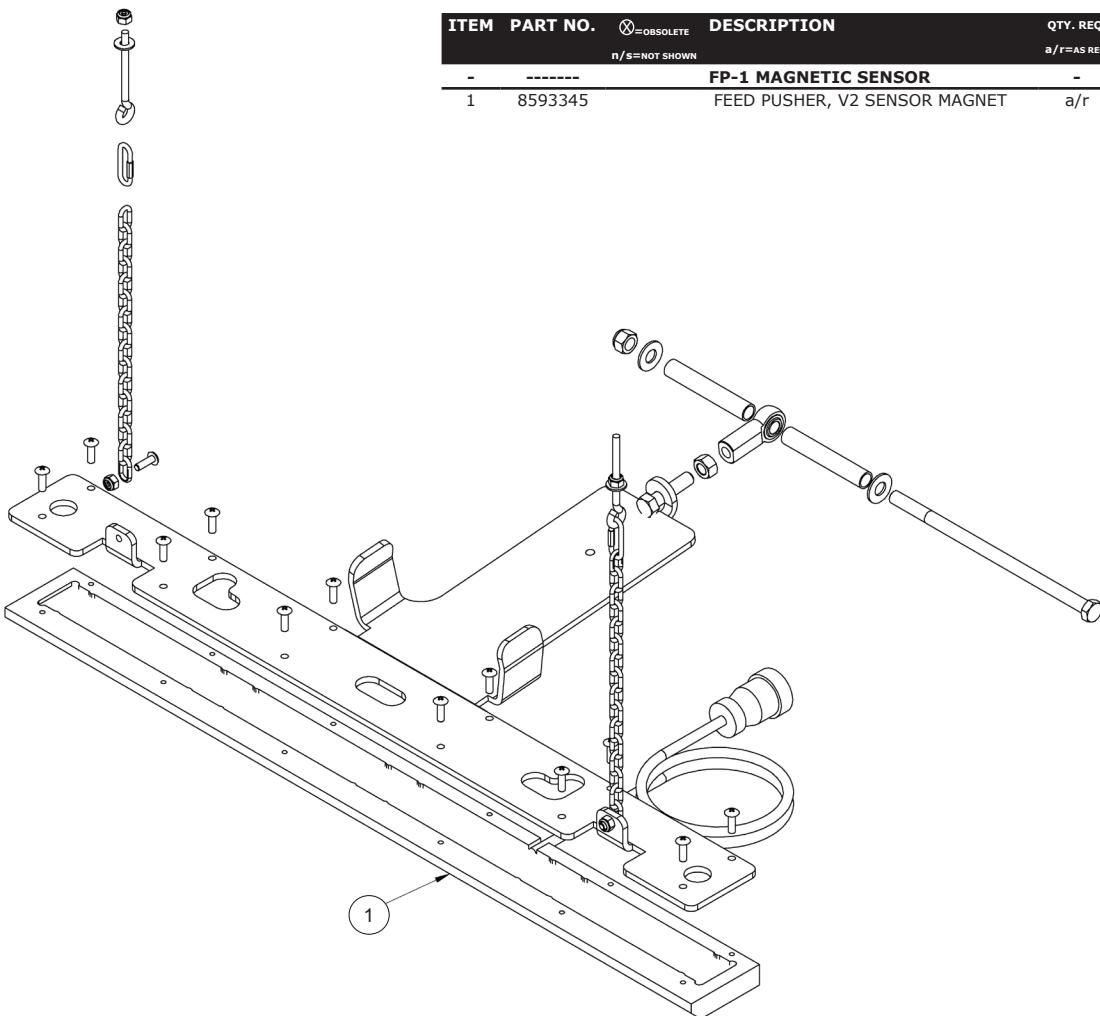


ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		N/S=NOT SHOWN	a/r = AS REQ.
<b>FP-1 SKIRT MOTOR</b>			
-	-----		-
1	8593342	FP, PINION S820 X 1' INK. W1/4	a/r
2	8593054	FP-1, MOTOR, 24VDC, 300W, 1800RPM	a/r
3	8593053	FP-1, BRUSH FOR QA153 MOTOR	a/r
4	8593043	FP-1, REDUCER 40 TO 1, BLUE	a/r

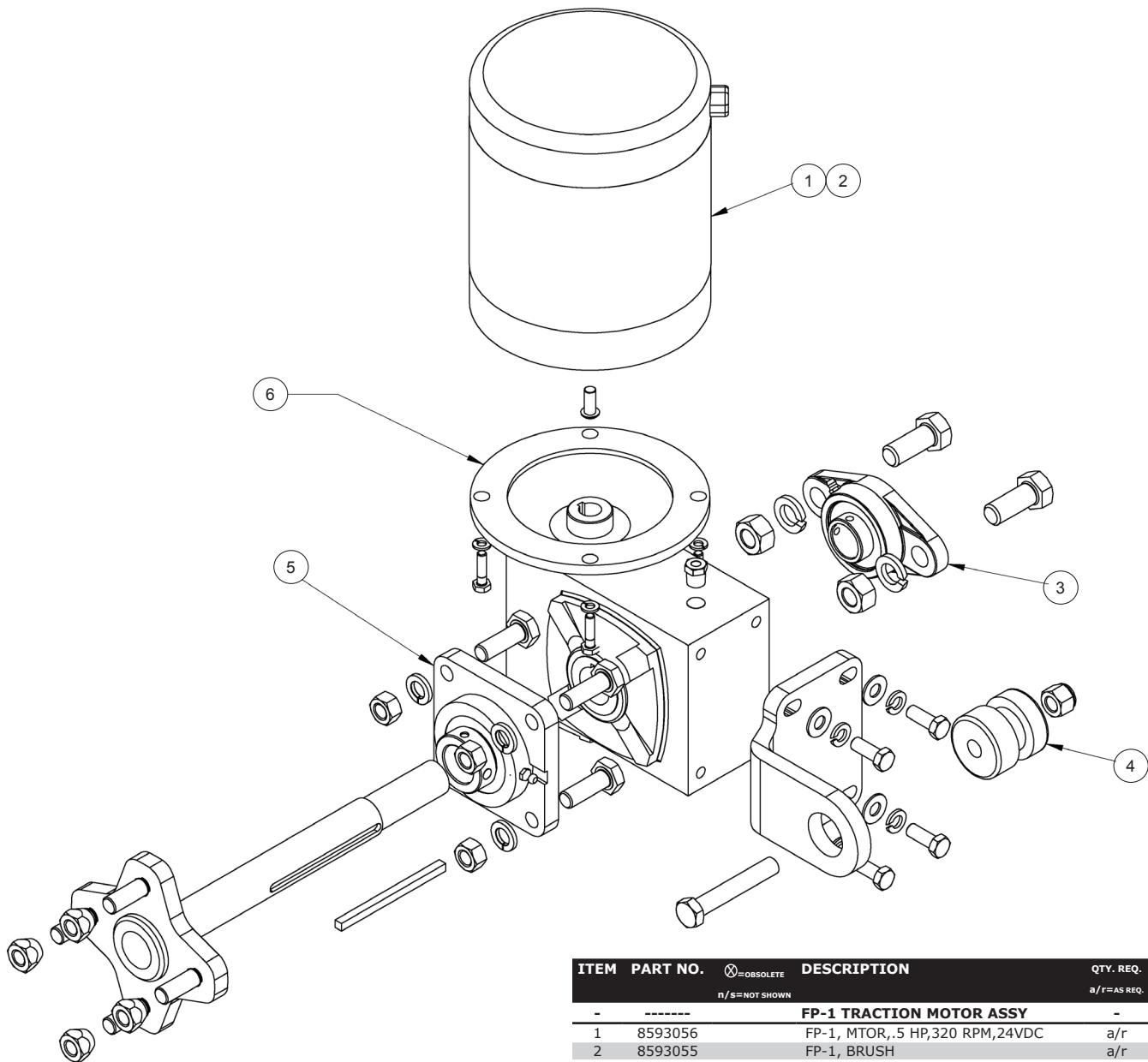
# FP-1 v2 Magnetic Sensor

SECTION <b>G</b>	PAGE <b>29</b>
EFFECTIVE: 12/11/18	

ITEM	PART NO.	DESCRIPTION	QTY. REQ.
-	-	<b>FP-1 MAGNETIC SENSOR</b>	-
1	8593345	FEED PUSHER, V2 SENSOR MAGNET	a/r



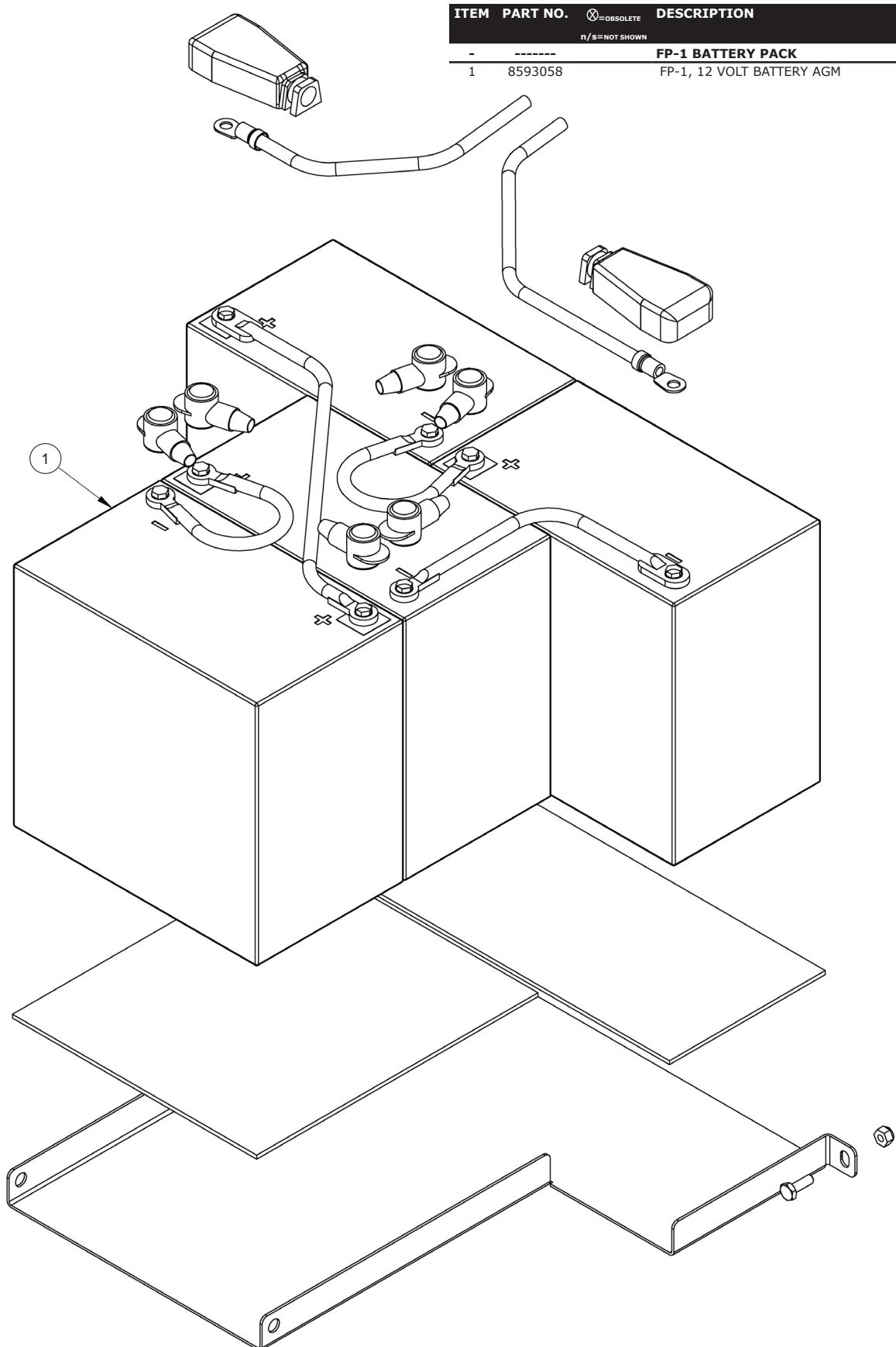
## FP-1 v2 Traction Motor Assembly



ITEM	PART NO.	Q=OBsolete n/s=NOT SHOWN	DESCRIPTION	QTY. REQ. a/r=AS REQ.
<b>FP-1 TRACTION MOTOR ASSY</b>				
-	-----			-
1	8593056		FP-1, MTOR,.5 HP,320 RPM,24VDC	a/r
2	8593055		FP-1, BRUSH	a/r
3	8593045		FP-1, FLANGE BEARING 1 IN SS	a/r
4	8593344		FEED PUHSER,VIBRATION DAMPING	a/r
5	8593044		FP-1, 4 HOLE FLANGE,1-1/8	a/r
6	8593042		FP-1, RDUKER CC60-15H, 1-1/8	a/r

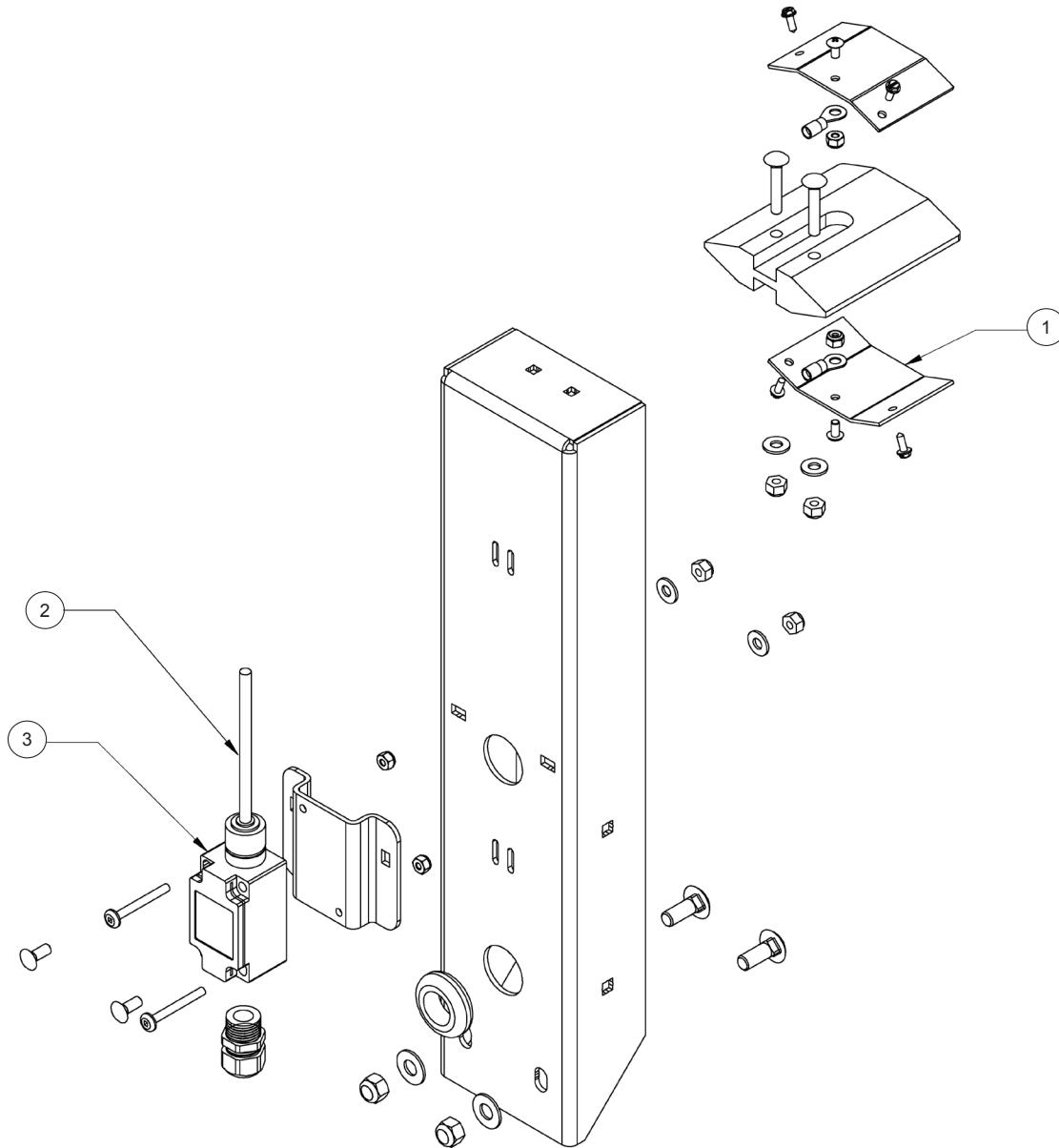
# FP-1 v2 Battery Pack

SECTION <b>G</b>	PAGE <b>31</b>
EFFECTIVE: 12/11/18	



ITEM	PART NO.	DESCRIPTION	QTY. REQ.
-	-----	n/s=NOT SHOWN	a/r=AS REQ.
1	8593058	<b>FP-1 BATTERY PACK</b> FP-1, 12 VOLT BATTERY AGM	-

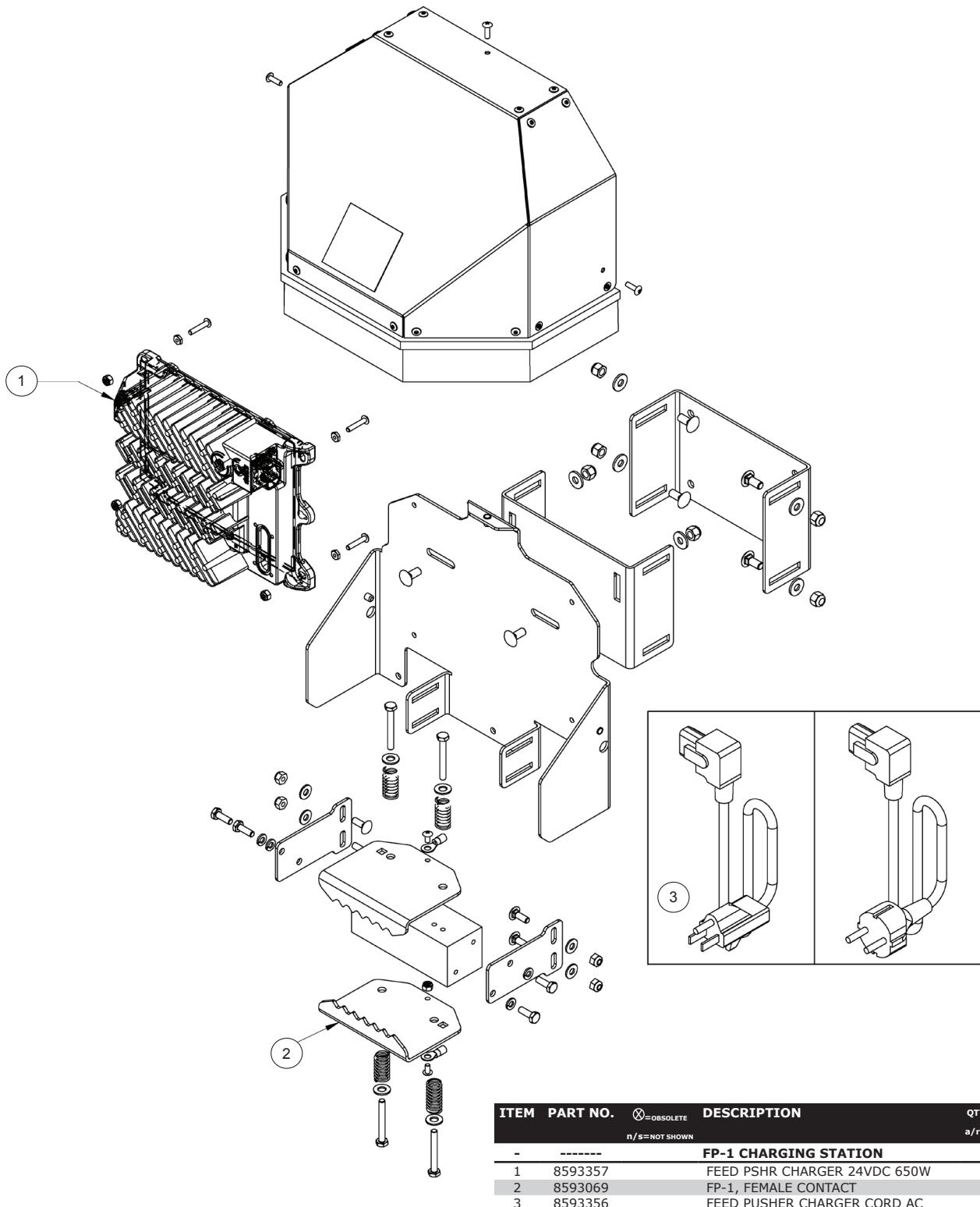
## FP-1 v2 Charging Connection



ITEM	PART NO.	DESCRIPTION	QTY. REQ. a/r AS REQ.
n/s = NOT SHOWN			
-	-----	<b>FP-1 CHARGING CONNECTION</b>	-
1	8593061	FP-1, MALE CONTACT	a/r
2	8593346	FEED PUSHER LIMIT SWITCH	a/r
3	8593065	FP-1, LIMIT SWITCH STOP	a/r

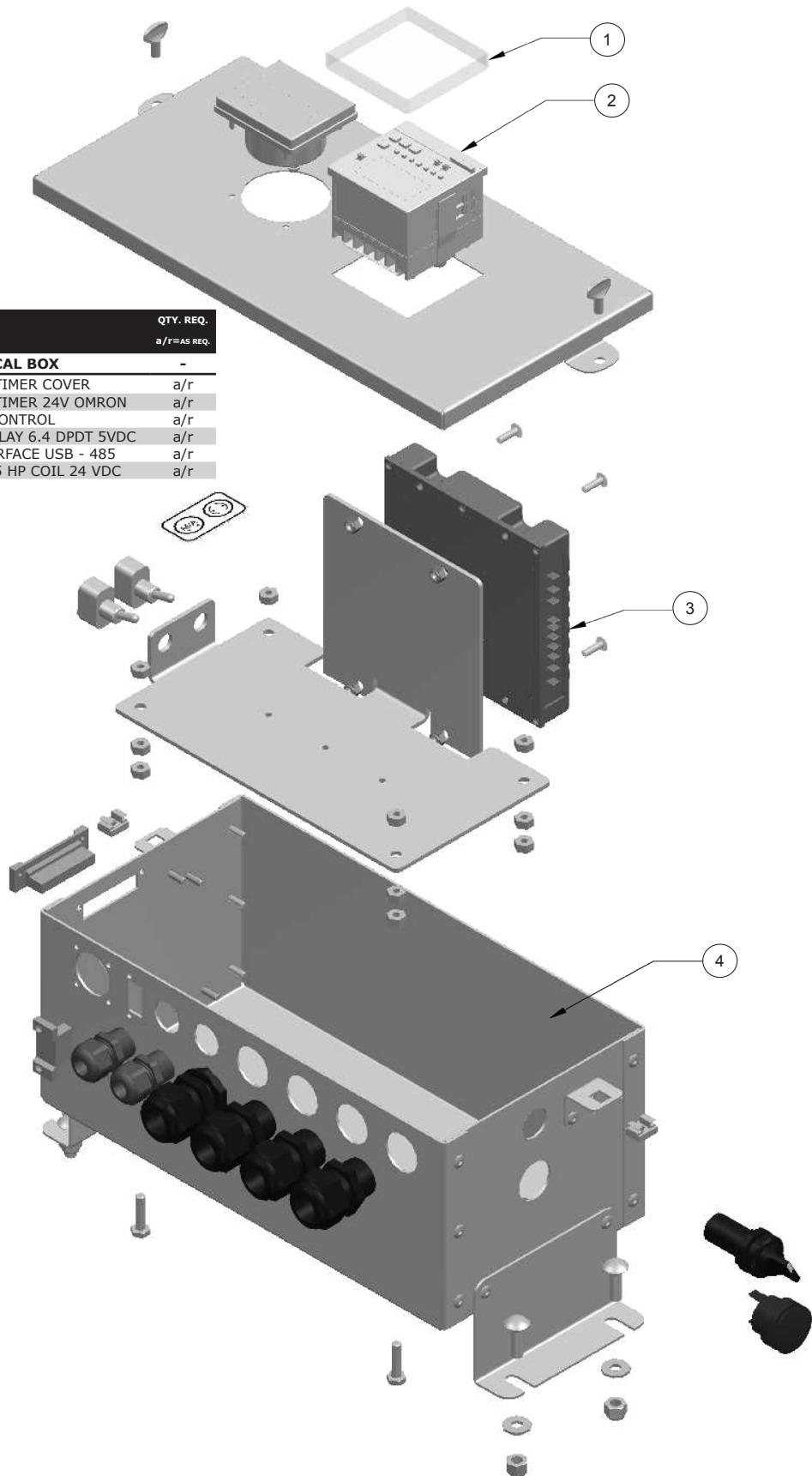
# FP-1 v2 Charging Station

SECTION <b>G</b>	PAGE <b>33</b>
EFFECTIVE: 12/11/18	



## FP-1 v2 Electrical Box

ITEM	PART NO.	DESCRIPTION	QTY. REQ.
		n/s=NOT SHOWN	a/r =AS REQ.
<b>FP-1 ELECTRICAL BOX</b>			
1	8593352	FEED PUSHER TIMER COVER	a/r
2	8593353	FEED PUSHER TIMER 24V OMRON	a/r
3	8593063	FP-1, MOTOR CONTROL	a/r
4	8593073	FP-1,TRMNL RELAY 6.4 DPDT 5VDC	a/r
5	8593355	n/s FP CABLE INTERFACE USB - 485	a/r
6	8593354	n/s FP STARTER 7.5 HP COIL 24 VDC	a/r



# FP-1 v2 Skirt Limiter

SECTION <b>G</b>	PAGE <b>35</b>
EFFECTIVE: 12/11/18	

